A SOFT SKILLS COMPETENCY FRAMEWORK FOR THE ENHANCEMENT OF INTERN EMPLOYABILITY WITHIN ESKOM

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DECLARATION

I, Zelda Salomé Bisschoff, declare that the Doctoral degree research thesis that I herewith submit for the PhD in Business Administration qualification at the University of the Free State is my independent work, and that I have not previously submitted it for a qualification at another institution of higher education.

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LIST OF ACRONYMS AND ABBREVIATIONS

3IR	Third Industrial Revolution
4IR	Fourth Industrial Revolution
EQ	Emotional Intelligence
EvaSys	Evaluation and Survey system
HEI	Higher Education Institute
LOC	Locus of Control
MPS	Managers, professionals and specialists
PsyCap	Psychological Capital
SOE	State-owned Enterprise
SPSS	Statistical Packages for Social Sciences
SQ	Social Intelligence
WIL	Work-integrated Learning

ABSTRACT

Worldwide unemployment is alarming. It is argued that employability offers a solution to unemployment. Yet, employability is still described as an ambiguous concept with many definitions and meanings. Available definitions limit thinking, as they did not solve the unemployment problem and employability gap in the First World. It is provisioned that the employability challenges will be compounded by the influence of the Fourth Industrial Revolution (4IR). Failure to align employability skills with the 4IR requirements will increase the skill gap in the 4IR.

Eskom has to face the 4IR on the back foot of near insolvency. Because Eskom is too important for the South African market, failing is not an option. A shortage of appropriate skills hinders continuity, turn-around, recovery, and growth in the organisation. Eskom holds its learner pipeline programme as one of its employability skills development vehicles. However, the learner throughput reports critically low figures with intern skills competency levels inappropriate for employability. Investigation indicates that the learner curricula focus solely on entrenching technical skills with no focus to develop soft skill competency. Hence, this study focused on developing an Eskom- specific soft skill competency framework to enhance graduate employability by means of the internship programme in the organisation.

The literature review focused on constructs that would render soft skill employability of graduates. A literature shortcoming was identified and conceptualised in terms of employability capital. The main objective of the empirical investigation was to determine the soft skill competency needs of Eskom to generate the soft skill competency framework.

A pragmatic research paradigm with a concurrent transformative mixed-methods design was selected to investigate the research problem. Quantitative data were collected employing a questionnaire developed from validated questionnaires appropriate for the objective and respected scholarly works. The questionnaire ended with a single qualitative, open-ended question where responders were allowed to report and rate any other skill behaviours deemed necessary for Eskom and raise opinions. Data were cleaned, organised, and analysed by the help of the IBM Statistical Packages for Social Sciences (SPSS) Version 25 software and the Microsoft Excel 2010 program. Statistical analyses included frequency distributions, scale reliability, normality, correlation analysis, one-way analysis of variance, and validity data testing. Content analysis was used to examine the responses of the open ended question. The analyses were conducted independently and were combined only for interpretation. In addition to the open ended question, further qualitative data were collected using the Delphi method to obtain the opinions of subject matter experts internal to Eskom to search for consensus for the quantitatively determined soft skill competency behaviours. Statistical analysis was used to analyse the differences and agreements between the panel members. Once data was merged, the soft skill framework was drafted by means of confirmatory factory analysis and literature guidance in a triangulated process of optimising the reliability of the

developed framework. After the framework had been developed, it was presented to a panel of academic specialists for evaluation.

The findings of the study indicate 15 primary soft skills with 22 secondary soft skills representing 214 soft skill competency behaviours. Confirmation was found that graduate employability can be enhanced by (i) graduate employability capital, which, when (ii) facilitated by emotional and social intelligence practices within work-integrated learning opportunities, will (iii) render soft skill competence.

The study contributes to the theoretical and empirical knowledge of employability capital knowledge. The study determines a simplistic, organisation- specific soft skills competency framework for enhancing intern employability within the South African framework through the lens of the 4IR. The simplicity of the framework renders it suitable for application by laymen to determine soft skill development shortcomings. High-reliability results of the framework indicate that the framework can be utilised in Eskom for current employees' development initiatives. The contribution is framed by the academic specialist panellists as "The soft skill framework is an eye-opener to determine shortcomings and training needs with regard to soft skills" and "The framework brings a new dimension of soft skills to the workplace, and the implementation will have an enormous impact on employer and employee relationship".

While it is not the intention of the study to generalise the framework to other organisations, the framework might provide insight to other organisations.

Key words: employability, graduate employability, soft skills, competencies, competency behaviours, employability capital, internship, soft skill development, Fourth Industrial Revolution, work-integrated learning.

CHAPTER 1

INTRODUCTION TO STUDY

"A great wind is blowing that gives you either imagination or a headache"

Catherine, the Great.

1.1 BACKGROUND

Globalisation and the expansion of technology have affected the economic world in every facet. To face the new globalised economic dispensation, skills have become a prominent commodity. In a global market dominated by cultural diversity and continuous change, growth and success now depend on how organisations can position them in terms of their organisational capabilities, offers, and external business environmental drivers. The organisational need for appropriate skill resources to face the dynamic operational environment gave birth to the term 'employability' as we know it today.

As a significant concept, employability evolved progressively as globalisation and technology became noteworthy drivers of economic activity. During the latter part of the 20th century, the world of work changed from the traditional, static environment to one that experiences continuous volatility, uncertainty, and change. Global market competitiveness drove employer requirements for graduate development focussed on innovation and customer satisfaction. Organisations were struggling to maintain growth paths and find a competitive footprint. Traditional qualification criteria driving employability were no longer sufficient to support organisation growth. Employability was now acknowledged as a function of competition, job opportunities, and labour market rules that brought about a demand for new skills and an increase in the skills gap (Gazier, 1998; McQuaid, Green, & Danson, 2005; Robinson, 2000).

Globally, unemployment is described as the Achilles heel of governments based on its effect on the socio-economic environments of nations. While many policy interventions and strategies have been initiated to address the unemployment challenge, little progress is reported. In fact, the report of the International Labour Organisation (ILO, 2019) on world employment indicates that the global youth unemployment rate has reached critical and disturbing figures. The report indicates that as much as 20 per cent of youths under the age of 25 are unemployed. The South African setting is even more daunting, considering the high overall unemployment rate of 29.9 per cent, with a reported youth unemployment rate for the age group 15–34 years at 40.7 per cent. This statistic presents as the highest in the world (Stats SA, 2019). The statistical results portray a narrative of great concern to the South African government, industries, and employers.

Modern-day employability has its roots in the employers' need for flexible entry-level employees to have more generic, value-added skills that will assist them in adjusting and changing with the turbulent global

and organisational environment. Consequently, the currency of success is not measured in monetary value alone. Now, it also represents the value of the human resource capital in terms of skills and relevant organisational knowledge. Unemployment is now predominantly a factor of employability gaps resulting from skill mismatches and not, as historically, the unavailability of employment opportunities. Without suitably competent employees, organisations cannot face their challenges and manoeuvre- consistent market changes (Singh, Burgess, Heap, Almatrooshi, & Farouk, 2016).

An abundance of literature presents soft skills as the missing element in employers' requirements for skill competency (Cimatti, 2016; Hurrell, 2016; Matteson, Anderson & Boyden, 2016; Rothwell & Rothwell, 2017). In fact, soft skills are highlighted as the foundation of organisational growth, customer satisfaction, performance, and a competitive market advantage (Hinchliffe & Jolly, 2011; Pandey & Pandey, 2015; Tomlinson, 2017).

Accordingly, the challenge of developing a graduate in the appropriate skills remains a policy priority for government and higher education institutions (HEIs). Various theories, constructs, and approaches have been postulated to establish appropriate curricula and training interventions to develop the harder and softer employability skills needed by organisations to face their organisational and market challenges. However, Wilson and Marnewick (2018) report that HEI curricula still cover only an approximate 30 per cent of the demands for employer skills and competency, resulting in a substantial gap between skill supply and demand. On a global forum, stakeholders remain uncertain about how to address the skill and employment challenges (Skobelev & Borovik, 2017).

While research indicates the individual voice of employers as vital in terms of supporting HEI development initiatives, responsibility rests on organisations to provide an appropriate environment and entrenchment system for enhancing employability skills (Hurrell, 2016; Tran, 2015; Van der Heijde & Van der Heijden, 2006).

Against this background, the employability debate becomes a critical and prominent research priority in the 21st century. The employability challenge is compounded further by the advent of the Fourth Industrial Revolution (4IR). Schwab (2017:1), who is widely known as the father of industrial revolution theory, describes the 4IR as follows:

> We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before. We do not yet know just how it will unfold, but one thing is clear: the response to it must be integrated and comprehensive, involving all stakeholders of the global polity, from the public and private sectors to academia and civil society.

The unprecedented exponential speed, scope, and effect on the entire global economy, industrial production, management, and governance complexities will distinguish the 4IR clearly from its predecessors. Even though it is predicted that the 4IR will offer economic growth opportunities and increased productivity, its effect will be felt predominantly in the economic and skill domains. During the 4IR, market challenges resonate from new job designs to job redundancy and from increased efficiency to a further increase in the skill gaps (Petrillo, De Felice, Cioffi & Zomparelli, 2018).

The 4IR forces are shifting fast, and the demand for new skills and competencies escalates at a faster rate than it did in the previous decade (Frost and Sullivan Consultancy, 2015). The effect will be felt not only in a widening skills gap but also in terms of technological unemployment that refers to the position when rapid expansion of digitalisation and technology leads to obsolete skills of current employees (Peters, 2017). Thus, in the context of the 4IR, employability refers to the potential not only to obtaining employment but also to keeping employment.

Comprehensive studies by the World Economic Forum (WEF, 2017) and the McKinsey Global Institute (2018) indicate that nine of the top ten skills needed by organisations to survive the 4IR and stay market relevant are the softer social skills, namely emotional intelligence and social intelligence.

Hence, the need arose for this study to examine the research problem and study objective through the 4IR lens and skill requirements.

1.2 PROBLEM STATEMENT

The immense challenges faced by Eskom, the South African state-owned electricity provider, include unmaintained infrastructure, incorrectly designed power stations, low- grade coal quality, state capture, an outdated business model, poor governance, defaulting customers, labour instability, high debt levels, financial instability, unsustainable government support, political interference, low cash flow, and affected going-concern status (Cruise, 2018, Eskom, 2018, 2019). Kenny et al. (2015:21) remark in their policy paper, “Electricity supply is of supreme importance to economic growth and the well-being of all South Africans.” This picture presents one of significant economic disruption. While Eskom has taken a stern stance against corruption and poor governance (Cruise, 2018), it still has to address its failure in terms of appropriate skill shortages.

A critical risk stated by Eskom is a shortage of adequate skills to support business initiatives (Eskom, 2019). The integrated reports for 2018 and 2019 highlight the challenges of leadership failure, skill retention, low employee morale, and inappropriately skilled workforce to support organisation continuity, turn-around, recovery, and growth. In fact, evaluations conducted of a group of technical employees in terms of recognition of prior learning processes showed concerning results. When measured against registered unit standards and qualification outcomes, only nine per cent of the sampled group was found to be competent

in terms of the employer skill requirements, which include both technical and softer skills, i.e. teamwork (Eskom, 2018).

One of Eskom's strategies in terms of developing appropriate skill requirements is by means of the utilisation of the graduate learner pipeline. Eskom (2016:73) states in its integrated report, “Our learner pipeline is one of the critical development areas that not only support the country's socio-economic contribution but also sustains our supply of skills.”

For this study and within the Eskom Procedure for the Management of Learners perspective (2014:5), a learner is described as a “qualified learner who already has been awarded a University degree or a University of Technology qualification or a certificate from a Further Education Training College for post-qualification experiential training in Eskom”.

A significant concern raised by the statistics in the integrated reports of Eskom is the critical low annual learner throughput of 18, 6 % in 2017/2018, which is a slight increase from the 11 % of the financial year 2014/2015.

Investigation of the Eskom Learner Development Policy (2016) indicates that the learner curricula focus exclusively on entrenching technical knowledge and hard skills. Accordingly, no attention is given in the Eskom learner curricula for developing soft skill competency, which is deemed the critical skills for organisations to survive the 4IR.

In considering generic soft skill frameworks that could serve as guidelines in developing soft skill programmes for learners, challenges are that:

a) employability skills differ between areas of specialisation (Kazilan, Hamzah, & Bakar, 2009);

b) the framework should support the objectives, culture, and values unique to each company (Codrington & Grant-Marshall, 2005); and

c) existing frameworks are developed predominantly in isolation within the Higher Education Institute (HEI) fraternity. Accordingly, they fail to consider the critical input of employers (Pool, 2017).

A final consideration is that every stage of the organisational life cycle, be it a start-up, growth, maturity, decline, or revival stage necessitates its own sets of competencies and skills. To apply a generic competency and skill profile blanket irrespective of the organisational life cycle stage would not support strategic intents (McNeil, 2017; Tam & Gray, 2016).

Therefore, the research problem is found in Eskom not having an organisation specific soft skills framework to guide the development of learners in employability skill competencies needed for the 4IR.

1.3 RESEARCH QUESTIONS

Given the stated problem discussed in the previous section, the primary research question is formulated as follows:

Which soft skill competencies will satisfy Eskom employability criteria for graduate interns?

To address the overarching research question, the following secondary theoretical research questions were asked:

1. What are the drivers and challenges of employability?
2. What are the driving concepts and theories that define graduate employability?
3. How can employability be developed?
4. Which driving concepts, theories, and drivers define soft skills?
5. Which soft skill behavioural competencies does Eskom require?
6. Do subject matter experts of Eskom support the determined soft skill behaviours?
7. Is the compiled soft skill competency framework appropriate and valid for intern employability in Eskom?

Questions 1 to 4 represented theoretical questions and were answered by means of a literature study in Chapters 2, 3, and 4. An empirical research study was undertaken to provide the answers to the remaining questions 5, 6 and 7.

1.4 RESEARCH OBJECTIVES

To find a suitable response to the research problem, the primary research objective was to develop a soft skill competency framework to enhance intern employability within Eskom.

The secondary research objectives derived to execute the primary research objective were to:

1. discuss the drivers and challenges of employability drivers;
2. conceptualise employability;
3. investigate how graduate employability can be developed;
4. determine driving concepts, theories, and drivers that define soft skills;
5. determine the soft skill employability competencies required by Eskom.

6. test if Eskom subject matter experts support the determined soft skill competencies; and

7. assess whether the compiled soft skill competency framework is appropriate and valid for Eskom intern employability competency development.

1.5 RESEARCH DESIGN AND METHODOLOGY

The objective of the study is to present a practical solution to an existing organisational challenge. Accordingly, the research falls within the applied research domain and supports the notion of a pragmatic research paradigm.

1.5.1 Research Paradigm

A pragmatic research paradigm was deemed the most suitable method to investigate the research problem and formulate the research conditions and assumptions of the study. Pragmatism accepts that there are single but also multiple realities and worldviews that lend them to empirical investigation and practical solutions (Creswell & Plano Clark, 2011). For a pragmatist, “the mandate of science is not to find truth or reality, the existence of which is perpetually in dispute, but to facilitate human problem-solving” (Powell, 2001:884); hence, the approach centres on the research problem and the usefulness of the research outcome. A further benefit of the pragmatic approach is that it permits and supports mixed-method design applications (Creswell, 2015).

1.5.2 Research Design Strategy

Considering which strategies to use to execute the research design, the researcher selected a mixed-method research technique which combines the benefits of the quantitative and qualitative worlds in one single study. Quantification of the soft skill behaviours allows the researcher to compare, draw conclusions, and make important decisions. On the other hand, qualitative research techniques offer the researcher the opportunity to gain a thorough understanding of the reasons and motivations that guided the survey participants in making the decisions on the soft skill behaviours (Johnson & Onwuegbuzie, 2004).

To follow the mixed-method strategy, the researcher adopted the concurrent transformative design, which enabled the researcher to address the phenomenon at different levels, compare quantitative and qualitative data during both the analysis and interpretation phases, gather rich, wide-ranging data, and provide methodological flexibility. The design also allows consideration of the quantitative and qualitative data at equal value, or different values of importance (Creswell & Plano Clark, 2011).

Two different data collections methods were selected to execute the concurrent transformative design, namely a survey and a Delphi-method.

A survey method makes use of a measuring instrument to collect quantitative and/or qualitative information (Creswell, 2013). The primary quantitative data was collected by means of a survey which also included a qualitative open-ended question. The quantitative and qualitative survey data was then collected concurrently. While the quantitative data represented the majority of the data collected, the supportive qualitative data were not deemed subordinate in value. The quantitative data were used to determine the soft skill behaviours necessary to satisfy employability criteria in Eskom. The qualitative survey data rendered valuable input in the environment in which intern development was taking place and accordingly supported the recommendations of the study.

The Delphi-method is a structured consensus development technique that resorts under the branch of action research designs (Vernon, 2009). The method was used sequentially to the concurrent survey data collection to establish whether a panel of subject matter experts of Eskom would concur with the soft skill behaviours determined through the survey method. The main characteristic of the method is that it entails cooperation between the researcher and organisational experts to resolve an organisational challenge (Avella, 2016). Accordingly, the Delphi method aims to determine the disagreement or level of concordance between the independent experts over two or more rounds of data collection systematically. In the end, the method presents qualitative confirmatory evidence of the experts' opinions about the accuracy of the soft skill behaviours collected for relevancy to Eskom’s employability needs. The Delphi method is advanced by scholars, i.e. Hasson and Keeney (2011), to ensure content validity of a potential framework.

The mixed-method technique provided the researcher with an appropriate tool to compile the soft skill competency framework directed at transformation and enhancement of intern employability (Halcomb & Hickman, 2015; Quinlan & Quinlan, 2010).

The mixed-method concurrent transformative technique used as guidance for data analysis is illustrated in Figure 1.1.

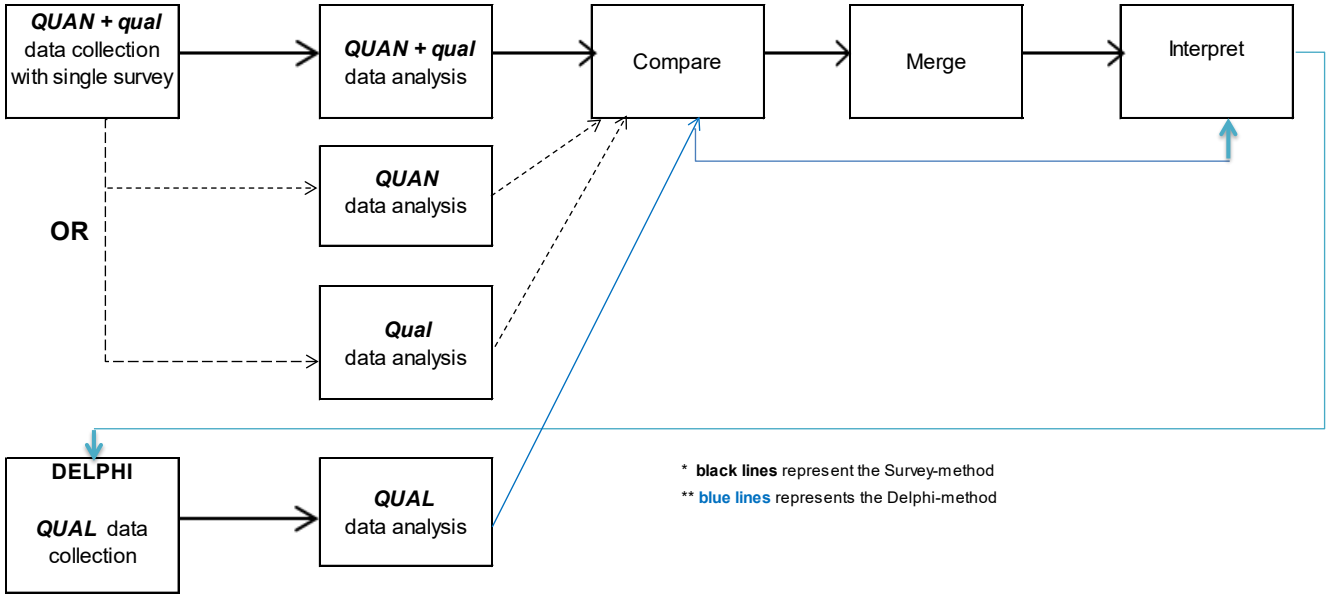


Figure 1.1: Mixed-method concurrent transformative technique

Source: Adapted from Creswell and Plano Clark (2011)

Once an appropriate strategy was selected, it was possible to determine the population of interest and the most appropriate sampling methods, how data will be collected, analysed, interpreted and the quality of the outcome ensured.

1.5.3 Research Methodology for Conducting the Study

Research methodology refers to how the study will be conducted to support the validity and reliability of the study outcome. It involves considering the study population that will satisfy the study objective, how participants will be sampled, the method that will be used to collect data, the process followed to physically collect the data, and methods employed to analyse and interpret the data. The next sections indicate how the researcher went about these requirements, as the mixed-method strategy requires different populations, sampling, and data- collection methods.

1.5.3.1 Survey population selection, sampling and data collection

Studying samples allows the researcher to generalise the study results objectively to the population under study. Accordingly, the sample should be represented appropriately to support generalisation to the broader population where deemed necessary (Sekaran & Bougie, 2016).

The objective of the survey data- collection stage was to collect quantitative opinions of the employability soft skill competencies needed by Eskom and qualitative opinions on the selection of the soft skills and the development environment of the interns. Two populations, namely supervisors and the middle manager band, were targeted purposely to assist in the survey research. Supervisors are responsible for developing

interns allocated to their sections, while the middle managers band is involved in developing interns and implementing strategic objectives of Eskom. The middle manager band consists of managers, professionals, and specialists, abbreviated and referred to as MPS.

Within the purposively selected population, sampling was conducted by means of simple random sampling method, which allowed the researcher to limit research bias (Babbie, 2011). Of the population of 493 supervisors, 300 were selected randomly to participate in the study. The MPS population consisted of 830 members. A sample of 763 was selected randomly by means of invitations to participate in the study. A combined 1,063 members were invited to participate in the study.

Data were collected primarily by means of a measuring instrument in a survey process. The measuring instrument was developed from existing validated employability skill instruments and respected scholarly works. The final measuring instrument consisted of 255 quantitative questions needed to be rated on a 6-option Likert scale. An open-ended question was added to the quantitative questionnaire to collect qualitative opinions concurrently. The questionnaire was converted into an electronic format for data collection by means of the UFS EvaSys Survey System Version 7.1 platform. Aldridge (2001) promotes the use of electronic survey programs, as it allows instant completion, the collected data are immediately available for analysis, and no intermediaries that could delay the collection process or create a risk to confidentiality requirements are needed. Such an electronic collection process also enhances the validity and reliability of the collected data.

Owing to the geographical distribution of the sample, a questionnaire link was sent by email to the selected respondents with an invitation to participate. The link granted the sample respondents access to the online UFS EvaSys Survey System platform, where they could complete the questionnaire if they wished to do so.

1.5.3.2 Delphi-method population selection, sampling and data collection

Once the survey data was received and analysed, further qualitative data was collected using the Delphi method. The Delphi aimed to obtain the opinions of Eskom subject matter experts within the Eskom Human Resource Development fraternity, the Eskom College, as well as the Centre of Excellence: Skills Development.

The purposive and snowballing sampling techniques were used to select a sample from these specialist areas. The purposive method of sampling entails that the characteristics and criteria of the sample are predetermined. The sampling method allows that the sample participants selected are the individuals who can contribute to the phenomenon outcome under investigation. The snowballing method involved that initial experts were selected and requested to recruit additional participants. This technique is useful in approaching the type of population that is not freely available and oft times presented in a small quantity (Alvi, 2016).

a) A sample of eight experts was recruited for participation in a panel employing the Delphi technique. An email request was sent to the sample to participate in a panel to judge the collected data in terms of the following:

b) Are the identified competencies and behaviours appropriate for employability skill requirements in Eskom?

c) Identify additional competencies not covered in the collected data.

d) Confirm agreement with the importance ranking of competency behaviours allocated by the respondents.

The sampling and data- collection techniques are described in detail in Chapter 5. Once panel consensus had been obtained, the data were prepared for statistical and inferential analysis.

1.5.3.3 Data analysis

Data analysis refers to the process of examining, cleaning, transforming, mixing and modelling data to discover the valuable information in support of the study objective, and for relevant decision-making (Heale & Twycross, 2015).

Prior to any analysis undertaken, data was examined, cleaned and transform in a data management process to extract the data in support of the study objective. Once cleaned and quality of data established the data was analysed and mixed for comparison and interpretation.

1.5.3.3.1 Mixing of data

Integration of the quantitative and qualitative data during the interpretation phase offered a robust and comprehensive understanding of the study concept, which allowed strong conclusions (Halcomb et al., 2015).

The quantitative results and qualitative opinions were integrated and considered carefully during the interpretation phase. Flowing from the data analysis, the integration and interpretation reflect the objectivity and credibility of the research process.

A popular technique for integrating results advanced by O'Cathain, Murphy, and Nicholl (2010) is triangulation, which allows the researcher to compare the results and opinions, also incorporating relevant literature.

Triangulation is a verification and interpretive process aimed at increasing result validity by comparing and considering the viewpoints and methods used (Olsen, 2004).

In this study, quantitative and qualitative data were combined for comparing relationships, similarities, and differences. The researcher employed the methodological (between-methods) and data triangulation to leverage the strengths of each of the qualitative and quantitative methods to fully integrate the opinions on the soft skill behavioural requirements of Eskom.

The data analysis and reporting sections present the results of the collection process in terms of response rates, demographic information of the respondents and opinions of respondents and participants.

1.5.3.3.2 Statistical techniques and tools used in data analysis

The IBM Statistical Packages for Social Sciences (SPSS) Version 25 software and Microsoft Excel 2010 program were used for descriptive analysis of the quantitative data, including frequency distributions for non-parametric data, correlation analysis, and factor analysis.

Data validity and reliability were confirmed by means of basic descriptive analysis.

Primary competencies and their related behaviours were categorised by means of confirmatory factor analysis and literature guidance in a triangulated process of optimising the reliability of the developed framework. Validity and reliability of the framework elements were confirmed by means of correlation and reliability analysis.

Content analysis was used to code, group, and evaluate the qualitative opinions added to the questionnaire by means of the open-ended questionnaire. Content analysis is defined as a research method for the subjective interpretation of the content of text data by means of the systematic classification process of coding and identifying themes or patterns (Dey, 2003). The central concept of content analyse revolves around uncovering themes in the data set collected to interpret and answer research questions by means of a logical and systematic process (Creswell, 2009; Bengtsson, 2016). It further allows researchers to expand on descriptive and comparative analysis by discovering the rationale of participant decision-making (Flick, Von Kardorff, & Steinke, 2004). Once the data had been sorted into themes, meaning was formed on the importance of the identified soft skills and the environment in which the development of interns occurred.

Unique to the qualitative Delphi-method is its suitability for a number of statistical analysis techniques to summarise and interpret the judgements for consensus (Schmidt, 1997). Two rounds were followed during the Delphi data collection process to establish consensus on the opinions of the Eskom panel experts. The data were analysed after each round by using the IBM SPSS Version 25 software to determine differences in means and modes of the participating panel members.

The data of the Delphi-method were not mixed with any other data, as its purpose was to validate the results obtained in the mixed- method data set. Data collected during the Delphi processes were analysed for

agreement between the expert panel members by means of the non-parametric statistic known as Kendall's coefficient of concordance (Kendall's W).

Quality requirements were incorporated throughout the design and execution of the research.

1.5.3.4 Research Quality Requirements

The quality of data is essential for deriving valid and relevant conclusions. Accordingly, the researcher had to ensure quality in every step of the research process commencing with the planning of the execution of the design. One method to account for valid outcomes is to commence with a literature review of scholarly material published in acknowledged journals. The theory should be used to guide interpretations of the empirical results and conclusions derived. Chapters 2, 3, and 4 present a due consideration of the theory guiding the concepts that framed the study. Data were interpreted against the theoretically derived framework.

Secondly, the validity and reliability of the measuring instrument were ensured by collecting the items from existing validated employability skill instruments. Validity was ensured by incorporating the quality requirements in planning the selection of the population, sampling the population, decisions concerning data- collection methods, and error- reduction methods employed during the compilation of the measuring instrument.

The reliability of the instrument tested at a significantly high Cronbach's Alpha, indicating that it measured the variables the researcher intended for it to measure. A study is considered internally valid if the researcher can demonstrate that the variables caused the observed effect (Drost, 2011). Collected data showed excellent internal validity, indicating moderate to strong relationships between the competency behaviours tested and their allocated categories. Further inferential analysis, in the form of confirmatory factor analysis, showed statistical relationships between the soft skill behaviours and the determined soft skills, confirming construct validity. Content validity was confirmed by the Eskom panel of experts by means of the Delphi-process.

Even though the reliability coefficient was high, indicating generalisation potential, the aim of this study was not to generalise the findings to other industries, nationalities, or contexts, but specifically focused on a solution to a problem in the Eskom context.

Research also has to comply with requirements that govern ethical practices considered in planning and executing the study.

1.5.3.5 Research Ethical Requirements

Ethical principles dictate that researchers should comply with three main objectives. The primary objective is to protect participants. The second objective is to guarantee that the research is conducted in a manner

that protects the interests of individuals and society altogether. The final objective is to scrutinise research activities and establish their ethical soundness, protection of confidentiality, the process of informed consent, and mitigation of potential risk (De Vos & Strydom, 2011).`

In addition, the Code of Human Research Ethics (British Psychological Society, 2011) outlines five main principals for ethical research conduct, namely respect for the autonomy and dignity of participants, the scientific value of the study, social responsibility, maximising benefits, and minimising harm. In line with these considerations, the research procedures incorporated all the ethical requirements necessary to ensure ethical research responsibility from the planning of the research execution to confirming the validity and reliability of the data prior to interpretation and deriving conclusions.

1.6 DEVELOPMENT AND EVALUATION OF THE FRAMEWORK

Throughout the research critical elements were determined (highlighted in blue at the end of each discussion point) to take in consideration during the development and framing of the Soft Skill Competency Framework. In Chapter 7, these critical determinants of the framework were consolidated into a draft proposal and submitted to a panel of Academic experts for evaluation on

a) Possible shortcomings of the framework.

b) Opinion on the alignment of the various aspects.

c) Opinion on the design and structure of the framework.

d) Opinion on the fit-for-purpose of the framework.

Opinions and advice were reviewed and incorporated into the final Soft Skill Competency framework for Eskom intern employability enhancement.

1.7 DEMARCATION OF THE RESEARCH

In itself, the research objective limited participation in the quantitative data- collection process to individuals involved in the development of interns and responsible for connecting the operations with the strategic intents of Eskom. No restrictions were applied to the geographical location of the respondents.

Similarly, only company individuals with expertise and experience in human development could confirm the relevancy and importance of competency behaviours.

Only academic experts in the field of industrial psychology could confirm the validity of a developed framework; therefore, participation was limited to these academics.

As indicated by the research topic and objective, in terms of the established framework, the study outcome will be for the development of interns. The study results indicate a high propensity for generalisation.

Should Eskom consider the generalisation of the framework to other employees as part of development strategies, the framework will be suitable for such purpose.

1.8 CONTRIBUTION OF RESEARCH

The contribution of the study is found in the development of a soft skill competency framework for intern development in Eskom. The framework was founded in literature and supported by empirically researching specific soft skill competency needs of Eskom for application by Eskom. In addition, the framework aligns with the soft skill competency requirements in support of the skill requirements of the 4IR. Subject matter experts internal to Eskom as well as independent academic experts evaluated the framework for support, validation, and applicability. Recommendations and submissions were integrated with the developed framework for optimal validation.

While the framework was developed for specific application in Eskom, it might be of use for other practitioners as guidance in similar framework developments. In Eskom, the framework might be applied in developing existing employees in preparation for the challenges posed by the 4IR.

Theoretical gaps have been determined during the literature study in the form of zero harm capital. This form of capital adds to the existing body of knowledge by expanding on the principles for the employability capital framework. The study's focus of zero harm capital was predominantly in line with the context of the study. Accordingly, the concept needs further development in future research.

The study also highlights important considerations in terms of the environmental requirements for intern development. This was an eye-opener to the researcher and is deemed an important consideration in similar future studies.

1.9 RESEARCH OUTLINE

The reason for this study is founded in its research questions and objective. The theoretical underpinnings are discussed through the lens of the 4IR. For proper reasoning and deductions, the research study is structured appropriately to avoid the confusion often involved in employability studies. To affect this aim, the layout of the literature study will be presented based on the employability conceptualisation of Wilton (2014:249), who postulates employability as a dual concept and argues a clear distinction between "graduate employability as the potential to gain desired employment and the realisation of this potential".

In line with Wilton's view, this study considers <u>employability as a potential</u> to gain employability as the "what" graduates should develop in order to obtain employment and is referred to as employability capital. On the other hand, <u>employability as the realisation of potential</u> refers to the graduates' skills and behaviour competencies developed once placed in work-integrated learning programmes or employed.

The rationale, investigative process, and results of the research are presented in eight chapters separated into three parts.

Part 1 represents a literature study that forms the basis of the empirical research project undertaken in Part 2. The theoretical basis of the study is demarcated in three chapters:

Chapter 2 contextualises employability in terms of its environment, drivers, stakeholders, challenges, and the 4IR. The chapter reports on Research Question 1.

Chapter 3 examines employability as a concept and discusses the methods that can be utilised to develop employability. The chapter answers Research Questions 2 and 3.

Chapter 4 conceptualises soft skills to answer Research Question 4. The chapter also presents theoretical shortcomings identified and derives the guiding theoretical soft skills framework.

Part 2 presents the empirical research project conducted in support of the study objective. It is presented in two chapters.

Chapter 5 discusses the research methodology and design followed in executing the mixed-method design.

Chapter 6 presents the results of the quantitative and qualitative data analysis and render the input variables for the development of the Soft Skills Competency Framework in satisfying Research Questions 5 and 6.

In Part 3, the primary objective of the study is satisfied, findings summarised, and the study concluded.

In Chapter 7, the highlighted critical determinants are utilised to develop the soft skill competency framework. In addition, the chapter reports on the evaluation results of academic experts with the aim to satisfy Research Question 7.

Chapter 8 concludes the study. An overview of the study is presented followed by the finally developed soft skill competency framework. Recommendations following from the research are made. The significance and contribution of the study are highlighted, and limitations are discussed. Recommendations for future research are made.

The study outline is presented schematically in Figure 1.2.

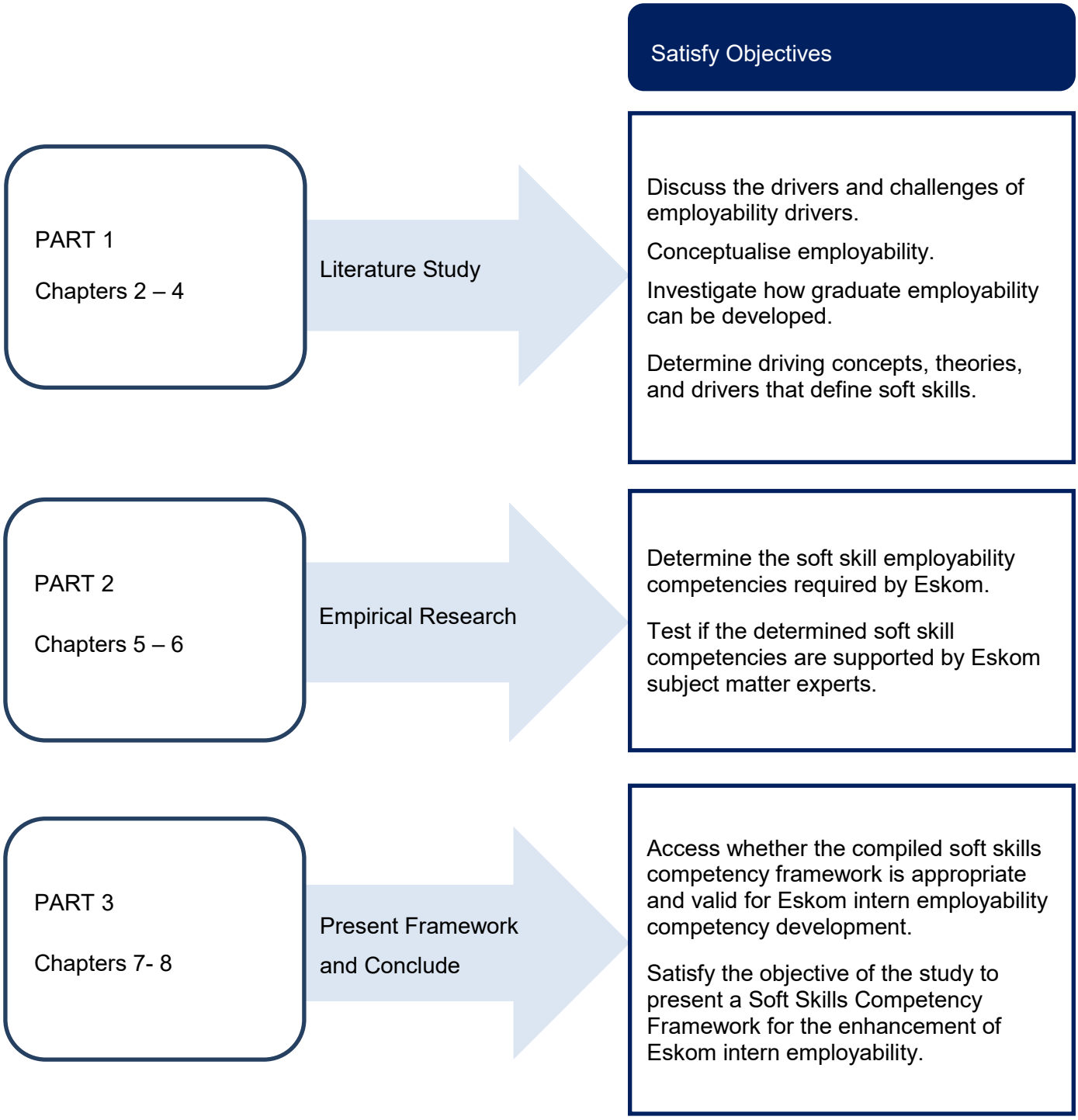


Figure 1.2: Study outline

Source: Researcher

1.10 CONCLUSION

The chapter provided an overview of how industrial revolutions had changed the landscape of the workplace and the demand for alternative skills. Eskom as study subject was presented with the dynamics background driving its current environment. An overview of the background to the problem statement was provided. The key questions that would be tested in support of the objectives of the study, were accounted for. The

research design, strategies, and methods used to conduct the research study were introduced. The quality and ethical considerations applied throughout the study processes were discussed. Clarity was provided as to the limitations of the study, and the study contributions were highlighted. The research project can be summarised in three parts, namely a literature study, an empirical investigation, and a result and concluding phase. Finally, the outline of the research investigative structure used in satisfying the research objectives was presented.

Chapter 2 presents the argument around which the study centres. Next, employability is introduced in terms of its environment, drivers, stakeholders, challenges, and 4IR.

CHAPTER 2

EMPLOYABILITY

2.1 INTRODUCTION

It is the year 2019, a year full of promise. Thankfully, the beat of the African gumboot dance and songs so often heard in the mines, fields, and factories has silenced. The world of our forefathers, where sweat and simplicity ruled, is long gone. In a place and time where dreams were limited to the now, pride was found in a good day's work, and a mere pittance gave survival to many. This could never be my future. Not in a world where the globe is my playfield – a place where I eat, love, play, pray, and study to fulfil the dreams of an African graduate. Opportunities are rife, and my passport to these golden opportunities is a certificate indicating me as the proud owner of hard-earned knowledge. Given my added abilities to use modern-day technologies and the advantage of computer skills, I represent the epitome of the employers' skill desire. My future is bright. My dreams are for a future where financial prosperity, prestige, and power rule.

My heart thunders in my ears, and my breath is stuck somewhere between where my stomach should be and my throat. What do you mean I do not have the necessary skills? You have vacancies, and I have the knowledge, qualifications, and some gained practical skills. There is nothing complicated about this. When do I start? Is my office ready?

No! No?! What skills are you talking about? With accusatory eyes, I turn to the higher education institute. You told me I was ready. You told me the certificate was the gateway to the Promised Land! Don't shift your shoulders! Commitment to have a relook at your curriculum – again – is not going to help me… How can you say you do not understand the problem of today's employers and what they want… Fourth Industrial Revolution?? Unbelief… I hear the sharp sound of broken dreams and feel the shreds stabbing at my heart.

Slowly I turn around. I am tired and disheartened, with only my shattered dream left. So many doors – so many 'no'. With the certificate under my arm, I walk to the bench to join the world of the unemployed. Already occupying the bench, there are many – just like me. With every step, the beat of the drums become louder…. (Researcher, 2018).

Paradoxical, the language and voice of the gumboot dance and song was the African workers' way to cope with work pressure and bring unity in their working environment. By the turn of the 20th century, toy-toying, the stomping of feet and spontaneous singing, would become the language and dance of expressing grievances, frustration, and discontent with the broken dreams of the unemployable and poor. While

employability is a global problem, it has never been felt more as in the South African context where the end of the apartheid regime brought promises of democracy, freedom, and the dream of a better future and prosperity for many. As Rose (1996:158) reflects, “we fulfil ourselves, not in spite of work, but by means of work”. Thus, the significance of finding a job is not only to provide food on the table. Maslow (1943) theorises that employment assists in fulfilling the higher-order psychological need for self-worth. The societal perspective holds that one of the basic human needs is to provide for self and loved ones (Coetzee, 2012). Whatever the conceptual understanding, employability strikes at the heart of global economies, government policies, organisation growth, and individual survival.

The argument raised in this study is that graduate employability can be enhanced through (i) graduate employability capital, which, when (ii) facilitated through emotional and social intelligence practices within work-integrated learning opportunities, will (iii) render the soft skill competence needed by organisations to support organisational growth. The literature review and empirical research project are framed around this argument in an integrated and holistic view through the lens of the 4IR.

This chapter contextualises the environment, drivers and stakeholders involved in the concept of employability. It commences with a (i) brief introduction to the meaning of employability followed by (ii) contextualisation of the three primary drivers of the employability landscape as witnessed in the literature, namely the global market drivers, government policies, and industrial revolutions. The next section (iii) discusses the implications and challenges for the employability landscape in terms of the 4IR. The chapter concludes with a (iv) discussion on the effect employability has on the labour market stakeholders of employers and graduates.

The focus of this chapter is the influence of the 4IR, its megatrends, and the implications thereof for the employability agenda. The chapter will address the research question:

What are the drivers and challenges of employability?

Following the contextualising of the study environment, Chapter 3 contextualises the concepts related to employability, namely employability capital, capability, and competency in the context of the study argument. The available work-integrated learning methods to develop graduate employability capability and competency are discussed. For the purpose of this study, the concept of work-integrated learning (WIL) is used broadly to recognise all types of graduate academic and application integrated learning with the workplace. The chapter concludes with a discussion of employability capital and introduces it as the signal of employability potential.

Chapter 4 introduces the main study subject topic of soft skills. The chapter clarifies the concepts of soft skill competencies. By using existing theories and models, graduate employability capital is linked through emotional and social intelligence as a mediator to soft skill competence in the workplace. The literature

study concludes with a theoretical framework to support the empirical study. The flow of the literature study process is demonstrated in Figure 2.1.

Chapter 2 Contextualising employability	Defining employability
	Key drivers of employability
	Challenges of employability in the context of the 4IR
	The impact of the employability gap on its main stakeholders
Chapter 3 Employability as capability and competency signal	Clarification of concepts
	Employability capital as the key driver of employability potential
	Human capital as driver of organisational performance
	Identity capital as the building blocks of soft skills development
	Psychological capital as facilitator of positive attitude and behaviour
	Social and cultural capital as drivers of human interaction
	Capability and competency approaches
	Development of employability capability for skill transfer in the workplace
Chapter 4 Soft skills as organisational success denominator	Key skills needed during the Fourth Industrial Revolution
	Conceptualising soft skills
	Linking the elements of employability capital to soft skills competency
	Theoretical shortcoming identified in literature
	Theoretical soft skill competency framework

Figure 2.1: Layout of the literature study

Source: Compiled by the researcher.

The chapter commences with a description of employability within the framework of the study objective.

2.2 DEFINING EMPLOYABILITY IN TERMS OF THE STUDY OBJECTIVE

The literature provides a rich and diverse basket of meanings, contexts and definitions of employability. The various definitions differ significantly, as they are establish through general theory seeking in the eyes of those in employment, those seeking employment, government policy, HEI, and employers' understanding. The many definitions will be considered in the veins of skill supply and demand.

2.2.1 Employability as a Skill Supply View

One of the earliest and most simplistic definitions was tendered by Hillage and Pollard (1998), who define employability in terms of having the capabilities to get employment, remain employed, and to find new employment if needed. The definition proved to be problematic, as skills and abilities single-handedly do not ensure employment. Nilsson (2010) proposes that hard and soft skills, individual characteristics, interpersonal skills, competence, and labour market conditions integrally contribute to graduate employability. On the other hand, Harvey (2001) presents employability as a single factor in his employability development model. The model holds that employability is a lifelong process of empowerment through critical reflective learning. While Harvey's definition differs partially from those of other scholars in terms of context, some agreement can be found in the works of prominent scholars like Jackson (2016). Harvey's view has also found its way into the highly regarded employability competency model postulated by Van der Heijde et al. (2006), which views employability as a function of learning, which involves a process of learning and adaption of personal elements like personality, attitudes, and ability. Knight and Yorke (2002), as well as Copps and Plimmer (2013), challenge Harvey's view and argue that employability is a non-linear process with multiple factor contributors and not only a single factor. They explain that every graduate student's development journey differs. This complicates the assumption of the model that a single factor will warrant employability (Tomlinson, 2012; Van der Heijde et al., 2006).

On the other hand, Wilton (2014:8) supports Hillage and Pollard's (1998) view and defines employability as "the individual possession, and the ability to convey the possession, of the skills, knowledge and personal attributes, that are positively associated with future job performance and are appropriate to a specific organisational and work setting".

Knight and Yorke (2002:8) offer a comprehensive definition, defining employability as "a set of achievements – skills, understandings, and personal attributes – that make [sic] individuals more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community, and the economy". According to Smith, Ferns, and Russell (2014), these input factors should allow graduates to commence their careers as effective employees from the first day of employment. However, Holmes (2015) argues that Knight and York's approach is theoretically flawed, as it ignores the effect of sociocultural factors (class, ethnicity, and gender) on employability development. These factors

were included by Tomlinson (2017), who describes employability as a collection of critical personal capital resources that create market value for graduates.

While most definitions hold employability as the process of obtaining the necessary skills to get a job, the relativity of employability as a factor of the laws of supply and demand within the labour market should not be underestimated. The next sections describe employability from the viewpoint of skills demand.

2.2.2 Employability from the Viewpoint of Skills Demand

In considering the employer demand view, the Confederation of British Industry (CBI, 1999) attempted to explain employability in terms of organisational benefit. They describe employability as the individual qualities, skills, and competencies needed in support of the changing needs of employers for market relevance. Ganzel (2001) expands on this view and defines employability as the graduates' potential to perform and adapt to the relentless changing workplace demands to become successful employees of the organisation.

Boden and Nedeva (2010:42) define demand- associated employability as "a set of attributes that makes an individual appealing to a heterogeneous range of employers". Caballero and Walker (2010:17) expand Boden and Nedeva's definition and describe employability as "the extent to which graduates are perceived to possess the attitudes and attributes that make them prepared or ready for success in the work environment".

Few studies have strived to combine these diverse viewpoints on employability into a single meaningful concept. Albeit different in view, the central theme throughout employability as a concept relates to graduate potential in terms of capital, knowledge, attributes, attitudes, and skills associated with capability, competence, and organisational success (Pitan, 2016; Pool & Sewell, 2007; Van der Heijde et al., 2006). In spite of the efforts to widen the concept of graduate employability further within the employer perspective, attempts still fall short of employer expectation for industry-relevant employability skills (Chhinzer & Russo, 2018).

In summary, the concept of employability as derived from its various stated definitions is considered to be:

- a capability approach (Sen & Nussbaum, 1993);
- a lifelong learning process (Coffield, 1998);
- empowered through critical reflective learning (Kolb, 1984);
- learning and development of personal elements (Bandura, 1993, 2012; Knight & Yorke, 2004);
- a set of accomplishments – skills, abilities, and personal traits (Knight & Yorke, 2002);
- individual qualities, skills, and competencies required by an employer (CBI, 1999);

- graduates' potential to perform and adapt (Ganzel, 2001) ;
- a set of attitudes and attributes that makes an individual appealing to employers (Goleman, 1998; Thorndike, 1920);+
- a set of key personal capital resources (Cote, 2005; Tomlinson, 2017); and
- a set of pre-professional identities that relates to and connects with the skills, behaviour, personal qualities, culture, and philosophy required by the intended career (Jackson, 2016).

Keeping Wilton's (2014) view, the study objective, and the initial literary view in mind, the study commences by defining employability for the intent of this study as follows:

> Employability is a dual concept that involves the graduate capital that renders graduate capability, signals employability potential to employers, and realises competency in the skills required by the organisation to support organisational growth and market relevancy.

While it is maybe simple to define employability, it is a complex concept. The complexity settles in the difference between the demand for employers' skills and the supply of labour skills – termed as the employability gap. In simplistic terms, the employability gap refers to the disparity between the skills required by the employer and the skills offered by the graduates/applicants (Collet, Hine, & Du Plessis, 2015). The gap arises from various external environmental influences. Next, the key drivers of employability are discussed to contextualise the complexity surrounding the employability gap.

2.3 THE KEY DRIVERS OF EMPLOYABILITY

In the literature, three key drivers of employability are discussed, namely global market drivers, government policies, and industrial revolutions. These three drivers are considered to influence the conceptualisation of employability.

2.3.1 The Global Market Drivers of Employability

Globalisation, technology, information flow, and competition are the dominant drivers of global markets (Li, 2017). These drivers brought a new dimension to the modern world of work. Man's new- found relationship with machine and computer drove an integrated society with no boundaries, termed in the business corridors as globalisation.

2.3.1.1 Globalisation

Globalisation brought about an exciting area for capital growth, investments, increased profits, and progression of the quality of human life. The opening of markets across borders in the mid-19th century steered expansion of international trade and value streams in an unprecedented manner. It also presented

unintended consequences and complexity to the market structures, skill platforms, and essence of the organisational world. Economies and societies increasingly converge into complex, interdependent, and integrated economic systems of production, management, and distribution chains demanding new skill resources for organisations to stay relevant. An added challenge is raised when considering the effect of globalisation on graduates , as skill abilities now include the ability to mobilise comfortably between different cultures and societies, work in multicultural teams, and adaptability (Hannula, 2018; Hauer, 2016).

Until now, the structure of the global market has been one of competitive warfare. This will change for better and worse. While Schwab (2016) argues for better collaboration between even competitors to face the new era of globalisation challenges, graduates and employees will have to improve their skill game in terms of understanding the dynamics of cross-cultural cooperation and collaboration. The rapid advancement of technology will contribute increasingly to and drive multicultural trading.

2.3.1.2 Technology

Technology advancement is the most significant driver in establishing automated factories, economic disruptions (positive and negative), and organisational growth. The development rate of speed in technology enables interconnectivity of global markets with an increase in international trade, market operation, competition, expanding economic integration, and interdependence. It spearheaded a world economic change of unprecedented wealth and growth with trade opportunities everywhere and at any hour. Without geographical and time boundaries, the economic space now demands from organisations to upgrade their business in terms of production, services, efficiency, and innovation (Cantwell & Kauppinen, 2014).

While posting many advantages, expansion of technology also raises several challenges. With the advancement of automation, jobs for unskilled and manually driven functions become obsolete. This scenario presents a burden for governments as unemployment escalates and employer skill needs are not met. Consequently, the need for new and appropriate market skills has become a critical focus area of governments, HEI, and organisations. Without the required skills, organisations cannot position themselves to stay relevant in a highly competitive global market (Filippov, 2018).

2.3.1.3 Market competition

Global market competition presents endless opportunities to drive competitiveness to new heights. The fast expansion of knowledge sharing and information processing stimulate increased competitiveness, which demands optimal organisational productivity and employee efficiency to ensure organisational growth. To remain competitive, organisations need to respond efficiently and with quality to the modern customer demands and needs. To support customer needs proactively, organisations realise that appropriate interpersonal skills and emotional intelligence skills have become a competitive advantage (Barney, 1991;

Finch, Peacock, Levallet & Foster, 2016). Additionally, organisations should have the skills capacity and flexibility to react and adjust swiftly to satisfy the ever-changing demand for new products and services.

Graduates and employees should take cognisance that market forces are changing at a rapid exponential rate, which continuously necessitates new competencies and skills. Therefore, organisations will have to make use of every opportunity to maximise market share by means of appropriate utilisation of skills. On the other hand, graduates should ensure that they are capable to demonstrate the skills required by employers to face market challenges. Another major requirement on the global platform is the need for reliant and functional information systems (Fahnert, 2015).

2.3.1.4 Information flow

The work environment of the 21st-century renders itself as an information-intensive entity within an ever-changing economy. Given that information is available at the press of a button, the primary global focus is now shifting from a production-based to a knowledge-based economy. Information flow allows stakeholders and investors a wealth of information and enables immediate response action with the notion that the one that responds the fastest gets the competitive advantage. Organisational problem solving is advanced by the availability of lessons learned from others with similar experiences. The global availability of information also has other consequences. For instance, the global market is not interested in the knowledge of graduates but instead focuses on how graduates can apply the knowledge they have. This demands from graduates not to depend on their degree- associated knowledge but to take self-responsibility for continuous learning, skill development, and experience (Wilton, 2011).

A consequence of information flow worth highlighting refers to the recent scandal that involves the South African- founded organisation, Steinhoff. Investors lost more than 80 percent of their investment value within a matter of hours when the market reacted on information indicating financial irregularities in the financial statements of the group. It highlights the intolerance of markets to poor leadership, governance failure, and unethical practices warning organisations on what behaviours and values are expected of their employees and leadership. While previously focused on own advancement, today's society does not turn a blind eye anymore to the abuse of resources, the poor, and disadvantaged (Hannula, 2018). Still focussed on quality products and services, the added qualities of socially responsible, ethical organisations and employees are now included in the demand packages of consumers.

During recruitment practices, it has become an important duty of employers to evaluate graduates' skills and propensity to act within ethical boundaries closely. An incorrect appointment may have diverse consequences for the survival of the organisation. For graduates, the need for updated market- relevant knowledge will place a premium on their employability potential. Continuous learning will increasingly become a skill competitive advantage (Welch & Welch, 2010; Wilton, 2014).

In summary, global market drivers have turned world markets and organisations on their heads. Simple operating methods that contained market complexity within the borders of nations have become complex interactions of cultural differences, market competition, and survival. So did the skills needed to manage these complexities. As the requirements of organisations for skills changed to face the challenges, so did their demand for specific graduate skills. The imbalance between skill demands and graduate skill supply had a considerable effect on employability on the national economic agenda. Employability is a critical element for sustainable income avenues at a national level. When organisations fail, the national economy suffers. Therefore, it is necessary to consider how government policy drives employability.

2.3.2 Government Policy as a Key Driver of Employability

The outcome of employability in government perspective is seen as an optimum, healthy economic system with low unemployment, reduced social grant dependency, and minimum criminal activities. Therefore, it is the responsibility of the government to balance global, national competitiveness with local economic and societal demands (Coetzee, 2012). A competitive economy makes optimal use of its resources to effect high-value activities important to wealth creation and long-term growth. The competitive advantage is generated through skilled and creative people. Countries that want to increase their competitive advantage should invest in quality higher education and development. Consequently, governments have developed many initiatives and policy instruments to address skill development. However, on a global level, the graduates education produced still fail to meet the skill demands of employers (Wilson & Marnewick, 2018).

Locally, the South African context does not differ from the challenges experienced by its global partners. As a response to the employability challenge, the South African government established policy frameworks to promote lifelong learning in both technical and non-technical skills to mitigate unemployment and associated social problems. The national policy objectives if the government are operationalised through a national competency framework (NQF) to ensure that “the education, teaching, learning and assessment process must provide a foundation of core competencies (knowledge, skills, attributes) and values that enable …graduates to continue to be proactive, enterprising learners, flexible and able to adapt to change throughout their careers and professional lives” (Coetzee, 2012:265). The national role to implement the policy direction is allocated to higher education institutions (HEI).

2.3.2.1 The role of higher education institutions as agents of government policy

Compelled by accreditation agencies and policy directives, HEIs are forced to change their business models to include outcomes in line with economic support. Faced with an employability concept not properly defined or even understood, HEIs struggled to model changes to the traditional content-driven curricula. Widespread modelling followed to put a face to the employability concept. For instance, the works of Knight and Yorke (2002, 2004) contextualised employability development through a curriculum approach and postulated their popular USEM model to support the concept. The model name is derived from its primary

elements namely, understanding, skills, efficacy beliefs, and meta-cognition. The scholars aimed to connect the employability skill agenda to degree programmes through more complex, deeper learning experiences. Knight and Yorke (2002:2) define employability as “the possession of understandings, skills, and personal attributes to complete tasks adequately at the graduate level”. This definition soon turned out to be insufficient, as it linked employability to academic success only.

The behavioural approach was expanded from the works of Van der Heijde et al. (2006) and views employability as the outcome of behavioural competency through a lifelong process of self-development and reflection (Pool et al., 2007). With the increased calls from employers for suitable skills to meet their strategic needs, the key skills approach (KSA) introduced the concept of hard and soft skills as employability components necessary to enhance workplace productivity. Aligned with the needs of employers, HEIs recognised the need to prepare students with some of the softer attributes valued by employers, i.e. emotional and social intelligence. Scholars responded to expand Goleman’s (2001) theory of emotional intelligence and Thorndike’s (1920) social intelligence into the employability frameworks, for example those of Pool (2017), Serrat (2017), and Livesey (2017). One such model, the lifelong soft skills framework, focussed on establishing the soft employability skills concept as an amalgamation of personality, attitudes, intelligence and attributes (SEMCOG, 2012).

The psycho-social approach considered employability within the graduate identity and self-development constructs. The conceptual model of graduate attributes developed by Bridgestock (2009) presents the elements of career self-management skills, career- building skills, self-management skills, and supporting dispositions and qualities as the contextual elements that result in employability potential. Bezuidenhout (2010:175) defines the psycho-social construct as “representing a combination of attributes, (intelligence, dispositions, values, attitudes and skills), that promote proactive adaptability in changing environments and enhances an individual’s suitability for employment and the likelihood of obtaining career success”.

Holmes (2015) presents the graduate identity approach as an alternate approach. The approach holds that graduates should work towards displaying the behaviour, values, and attributes that would render them employable by employers. Graduate identity is held to be a deep commitment of graduates to demonstrate their alignment of knowledge, skills, and traits to the employer’s requirements (Coetzee, 2012). The benefits of the approach are that it reduces the cultural shock when transferring from the HEI space to the workplace and assists graduates to form professional identities. However, it is critical for HEIs to teach graduates the methods and processes they can use to shape, reflect, and self-assess their identity development (Lairio, Puukari, & Kouvo, 2013). However, the effective development of graduate capital is dependent on the persistent engagement and constructive alliance of HEIs with external stakeholders (Meyer & Bushney, 2008) for work- integrated learning opportunities to allow graduates to practise their abilities.

While giving some direction to the employability concept, the models are criticised for their difficulty in measuring behaviour and soft skill performance (Hinchliffe et al., 2011). Ensuing developments then

focused on measurement methodologies and scales that would determine graduate employability potential, for instance, the Employability Psychological Career Resources Inventory (PCRI) developed by Coetzee (2008). A National Survey to Assess Student Learning Outcomes was also developed by Lichtenstein, Thorme, Cutforth and Tombari (2011) to assist in measuring the skill gap and understand the relationships and influences of the dynamics involved in employability.

In spite of the dedicated efforts by HEI to comply with government policy, there remains a huge disparity between what graduates believe represents employability (graduate perception), which skills HEIs think should be developed (skill supply) and the skills employers need. Studies conducted by Mason, Williams, and Crammer (2009) as well as Wilton (2011) provide evidence that point to the inadequate effectiveness and value of formal skill initiatives of HEIs due to their limited transferability.

2.3.2.2 Other policy challenges

In the South African context, a further constraint can be highlighted in that the secondary school subject selection predominantly focuses on non-science career options, which limits higher education career path choices. Most often, non-science career paths are not aligned with market demands (Kwach, 2019; Rothwell & Rothwell, 2017).

Furthermore, the structural inefficiencies in the South African Labour Relations Act render it difficult for employers to replace inexperienced workers with suitably skilled ones. Entrepreneurs are also often disheartened by the Act to establish or expand businesses that limit employability opportunities (Kwach, 2019). Many believe it is necessary for governments to refocus their attention on addressing systemic economic challenges, structural inefficiencies, and relevant policy interventions.

In spite of dedicated attempts, HEIs have not yet found the optimal solution for the skill proposition that would satisfy the skill requirements of employers. In fact, limited inroad has been made to link curricula to the skill need. The skill challenges become even more daunting when considering the diverse effects led by industrial revolutions (Atiku, 2019).

2.3.3 The Industrial Revolutions as a Key Driver of Employability

One of the primary drivers of the industry and economic transformation relates to the so-called industrial revolutions. These revolutions cause major market shifts that change the landscape of labour markets and skill requirements. The effect on the workplace is dramatic. Centuries ago, the predominant, family- driven businesses operated in simple, localised economic hubs with security in and control over their market environments. While a limited few ruled through monopolistic practices, the majority was satisfied with the market benefits offered to them. This simplistic way of doing business changed during the 15th century when Vasco da Gama and Jan van Riebeeck swept the seas in an exploration of other countries with the intent of expanding their trade markets. The historic roots proved to be the first attempt at market

globalisation. However, it was of limited to no benefit due to the vast distances and limited communication avenues (Mokyr, 2018). Speedier transport methods brought a change to this simple lifestyle. Understanding the dynamics brought about by the 4IR necessitates the need to contextualise industrial revolutions as primary historical drivers of the global industry and economic transformations. Often referred to as a conglomeration of megatrends, these change-driving global forces shape the futuristic world, as they cause major market shifts that change the landscape of economics, labour markets, business operations, skill requirements, societies, and personal lives (Frost and Sullivan Consultancy, 2015).

The First Industrial Revolution saw the advent of accelerated transport infrastructure and industrialisation. This revolution was a movement away from agricultural and handcrafted activities to mass- production industries, such as coal, railroads, and textiles. The loss of jobs in certain industries was offset by the creation of jobs in others. The revolution had limited to no effect with regard to employability.

The Second Industrial Revolution, also referred to as the Technological Revolution, was dominated by mass production, oil, steel and expansion of the electricity sector. Similar to the first revolution, there was a limited effect on employability. These first two revolutions then offered an exciting time for the advancement of the quality of human life and organisations to flourish (Mokyr, 2018).

The Third Industrial Revolution (3IR) was earmarked as the era of innovation, which saw the birth of manufacturing digitisation, green energy and a change in production methodology through automation. The rapid expansion of technology advancement steered the development of international trade and value streams in an unprecedented manner at a much faster speed as those of the first two revolutions. The revolution brought a new dimension to the modern world of work, as machine and computer drove an integrated society with few boundaries, fast expansion of knowledge sharing and information processing. Adding the concept of globalisation with open, global markets and advanced information flow, market competition has now become the name of the game. In this era, economies, societies, and business models increasingly converge into complex, interdependent, and integrated economic systems of production, management, distribution chains and continuous change (Li, 2017). Within the cycle of continuous change, the primary competencies of today become contextually irrelevant tomorrow - hence the employability skills challenge. Many facets of the new world of work demanded new skills such as innovative thinking and flexibility to react and adjust swiftly to satisfy the ever-changing demand for new products and services (Fahnert, 2015). Without the required skills, organisations cannot position themselves to stay relevant in a highly competitive global market (Xu, David, & Kim, 2018)

Historically, skills required by employers were equal to skills provided by higher education. With the commencement of this revolution, the status quo was disrupted brutally as changing market conditions gave rise to organisations increasingly raising the bar in terms of the skill levels required from graduate recruits and current employees. While organisations are able to adjust their strategies in a relatively short time span to align with market demands, the same cannot be said for HEI curricula in which changes can

be implemented only over a considerable period. Consequently, graduates are not qualified suitably to meet the skills demanded by employers (Osmani, Hindi, Al-Esmail & Weerakkody, 2017). It can be argued that the established definitions and approaches are limited in thinking, as they did not solve the unemployment problem and employability gap in the first world. A significant challenge is that the employability challenge is compounded by the advent of the Fourth Industrial Revolution (4IR).

The Fourth Industrial Revolution is structured as an expansion of the 3IR into a conglomerate of the digital, physical, and synthetic biology, which will involve robotics, automation, artificial intelligence, digitalisation, and the Internet of things. The period is referred to as the interconnected network of data, people, processes, and objects. The main objectives of this industrial period are to optimise the speed and quality of product or service delivery (productivity), increase flexibility, and drive manufacturing for higher efficiency through automated processes in an eco-sustainable manner. In this synthesis, it is postulated that humans and machines will merge in a cooperative relationship to the advancement of a better world for all (Schwab, 2016; Skobelev & Borovik, 2017). Keeping the historical consequences of industrial revolutions in mind, the objective of the 4IR is to solve social problems with the focus diverting from profits and industrial progress to the value of human life. The focus will be on aspects that make the lives of people easier through a convergence of science, advanced technologies, and robots (Ganzarain & Errasti, 2016).

Irrespective of these predicted advances, the 4IR presents one of the most momentous challenges to confront governments, employers, employees, and graduates on a global level, and the effect on the skill requirements of organisations will be severe (Hauer, 2016). Market challenges during the 4IR range from substantial job design to job displacement and from intensive productivity to broadening skill gaps (Petrillo et al., 2018). While new jobs will materialise, for instance, in renewable energy technologies and technological advances, others will disappear or be replaced partly by machinery and digital technology (World Economic Forum, 2016).

2.4 CHALLENGES OF EMPLOYABILITY IN THE CONTEXT OF THE 4IR

Market forces, whether through globalisation, policy direction, or industrial revolutions, affect the survival of graduates and organisations equally. According to Van der Heijde (2014), the importance of employability during changes in the market is contextualised mainly in the domains of unemployment, the organisation, and the changing organisation. Vielmetter and Sell (2014) predict that the challenges posed by the 4IR will be channelled through six megatrends, namely globalisation 2.0, environmental crises, individualism, value pluralism, the digital era, demographic changes, and technological convergence. Supported by market forces and dilemmas, the merging of these megatrends will shape a complex internal and external organisational environment. Subsequent changes in working patterns hold a manifold of implications for the market environment, organisational, and individual levels. The effect is predicted to be similar to that of the 3IR, but in an exponentially quicker and stronger way (Frost and Sullivan Consultancy, 2015). Notably, it is predicted that the skill gap generated by the 3IR will further increase during the 4IR as labour market

disruptions occur through automation and technological displacements. It is then a necessity to understand the dynamics of these megatrends and their implications for the three domains, namely the work environment, the changing organisation, and the employability of graduates/employees.

2.4.1 Megatrend 1: Globalisation 2.0

Vielmetter and Sell (2014) hold that Globalisation 2.0 will differ significantly from the first globalisation drive. Firstly, the traditional market environment and the patterns of commerce will change. As digitalisation and technology advance, the complexity and speed of doing business will increase further dramatically. Proactive and innovative competitors can disrupt markets and increase market share by improving the speed, quality, and price of their value creation. Organisational competitiveness is not only a representation of its market value creation, but also a reflection of its performance, its utilisation of the employability capital, skills, and the capability of its employees to join hands effectively and interact positively (Wang, 2016). Accordingly, existing business models will become redundant due to these competitive forces driving industrial changes (Schwab, 2016).

Secondly, the focus of Globalisation 1.0 on expanding business markets across borders but retaining centralised decision-making will change, as such business models and the application of management practices equally across borders do not allow for timely responses to local business opportunities (Vielmetter & Sell, 2014). Escalating competitive forces in Globalisation 2.0 and growing economic segregation will present multiple challenges for organisations. Organisations will be required to develop both global and local strategies, as the concept of globalisation finds its roots in this megatrend where global brands would be localised through innovative ideas taking cognisance of the local economic development, education standards, organisational and technological maturity, social, and cultural spectrums. A critical consequence is that organisations might be required to follow conflicting and multiple goals simultaneously to reconcile the social, economic, commercial, and ecological aspects holistically. These collective actions require adaption of existing knowledge, and application of it in a different local economic environment demands a paradigm shift and the development of contextual awareness and intelligence (Khanna, 2014). Historical organisational structures were simple and related to products or purposes (Oliveira & Takahashi, 2012). The 4IR organisational transformation will require agility in both strategic and operational innovation. Market and operational threats should be determined proactively, and appropriate and holistic mitigation strategies should be set up across the entire organisational value chain.

A growing body of literature indicates that soft skills of graduates and employees will direct the degree and direction of jobs and performance of organisations, as well as increase competitiveness and profits. The need to learn, self-develop and display the appropriate human capital and skills continuously will become increasingly important to remain employed and maximise organisational performance in the continually changing market place environment during the 4IR (Cimatti, 2016; Schwab, 2016; UKCES, 2014).

2.4.2 Megatrend 2: Environmental Crisis

The previous revolutions have affected the environment and social sphere in which the organisations operate diversely and irreversibly. Globally, green institutions, organisations, and governments are facing the critical challenges of climate change initiated by automation and technological advancements. Production activities of organisations and commerce consume substantial shares of the earth's resources and consequently have a major collective effect on the natural environment. Accordingly, natural resources have declined rapidly over the past two centuries. The abuse of natural s will continue more rapidly during the 4IR. A critical organisational implication is that today's society does not turn a blind eye to abuse of eco-systems anymore. Still focussed on quality products and services, the added qualities of socially and ethically responsible organisations are now included in the consumers demand package (Hannula, 2018). It has become imperative for organisations to recognise that operational strategies should be considered within the earth's replenishing and balancing productivity rate. In contradiction of the 3IR, during the 4IR, market success and positions of organisations will be linked inextricably to their attitude towards the ecological environment, their carbon and water footprint, as well as their ability to balance profit maximisation and eco-sustainability optimally (Ostrom, 2010).

Increased pressure from the green electoral fraternity will see governments increasingly place regulatory duties on organisations to adopt sustainable operations and embed the environment in their value chain, cultures, structures, processes, and procedures. The amount of transformation and innovation required to give effect to demands for a sustainable world will require organisations to find new ways of thinking and collaborate across boundaries, and even competitors, to find joint solutions (Vielmetter & Sell, 2014).

For the graduates and employees, this megatrend will require green consciousness (Vielmetter & Sell, 2014), the ability to identify and mitigate threats proactively (Kerner & Thomas, 2014), and interpersonal skills for stakeholder collaboration and the ability for holistic system application (Waugh & Streib, 2006).

2.4.3 Megatrend 3: Increasing Individualism and Value Pluralism

Within the 4IR, markets will converge into complex environments where increased prosperity will drive individualism in developing societies. With the focus on personal goals and desires, the consumer will play a dominant role in product demands, demanding consumer rights, and excellent customer service with a certain expectation of good governance (Frost and Sullivan Consultancy, 2015). As individualism increases, values will differ increasingly with little commonality in demand – what is good for one, will not be the same for another. Schwab (2016) argues that this trend will result in an increase in customised products, services and niche market opportunities. The diminishing principle of economies of scale will severely affect the bottom line of organisations. Organisational flexibility, consumer knowledge, and sensitivity to its customer base increasingly will determine organisational profit margins in a fragmented market environment (Vielmetter & Sell, 2014).

The implications for organisations will be that managerial direction and control will be replaced by self-direction and accountability. The need for softer skills will increase exponentially to satisfy demands of individual consumers (Frost and Sullivan Consultancy, 2015; Vielmetter & Sell, 2014).

Hence, graduates and employees will need to develop and signal the softer skills of self-management and motivation, emotional intelligence, social intelligence, teamwork, customer- orientated qualities, and flexibility, as these increasingly will become important in the workplace.

2.4.4 Megatrend 4: Digital expansion into complex systems

The digital trend represents the core element of the environmental change drive of the 4IR market, as it provides the measures for substantial automation and single- most reason for job losses. Manufacturing digitalisation will be expanded upon with the primary focus on the cooperative relationship between machine and man through artificial intelligence. Smart digitalisation solutions involve a customer base with increasing influence as to the manner of commerce and preferred suppliers. The Internet will provide better access to knowledge and networks. In every connected world, real-time data provide immediate information that will optimise decision making and drive continuous competitiveness. Accordingly, virtualisation will disrupt the historic power relationships between organisations, consumers, and employees. This new trend forces organisations to seek competitive advantage by increasing consumer demand research, product and service quality, and productivity, and efficiencies would increasingly put pressure on teamwork and interrelations between the internal and external environments across boundaries (Frost and Sullivan Consultancy, 2015; Vielmetter & Sell, 2014). Leaders would need to prioritise the robustness and integration of IT-systems. Organisational leaders would need to focus actively on strategical process management and direct focus on advancing loyalty in customers. Furthermore, the increased intolerance of markets and consumers of poor leadership, governance failure, and unethical practices will demand from leadership to direct primary attention to governance issues and management of reputation (Enikolopov, Petrova, & Sonin, 2018).

Technological capabilities of graduates/employees vary, depending on individuals' age, economic and social backgrounds, as well as access opportunities. Consequently, the workplace becomes one of fragmentation where groups in the workplace suffer from this access disparity. The integration of knowledge management and cross-learning between groups and departments would enhance the employability of employees. Leaders will have to focus on promoting team cohesiveness and facilitate engagement in this era of increased individualism. Effective collaboration, analytical process to support decision-making and appropriate knowledge-sharing skills would be required to defragment organisational functions and encourage a seamless value chain (Frost and Sullivan Consultancy, 2015; Vielmetter & Sell, 2014).

2.4.5 Megatrend 5: Demographic Change

The global environment has experienced dramatic changes in its population demographics. While populations are expanding rapidly, the majority of the constituent is ageing. As the baby boomers prepare to retire from the workplace, the available skills and experience will decrease rapidly. Pension funds will experience structural pressure, while organisations will scramble to replace the skills from a limited talent pool. Similarly, the consumer pool demographics with change as Generation Y dominate the economic markets driven by a demand for more digitisation, internet capabilities, technology, and a greener world. Consumers have an increasing requirement for transparency, information, and engagement. The new patterns of consumer behaviour driven by technology and the Internet of things will force organisations to reconsider and find alternative methods to develop, market, and distribute products and services (Schwab, 2016). The demographic changes mean that organisations will have to review their workplace strategies to change from efficiency to effectiveness in an effort to optimise limited resources and establish consumer loyalty.

Consequently, the increased demographic shift also brings a critical focus to age- 'related resistance to change (Kunze, Boehm & Bruch, 2013). Change receptiveness involves important skill aspects, as it supports open-mindedness and critical thinking (Hasslöf, Lundegård, & Malmberg, 2016). In turn, research evidence indicates that change readiness and age are related in that older employees are often resistant to change when considering new skills (Madsen, Miller, & John, 2005; Van Dalen, Henkens, & Schippers, 2009).

On the other hand, younger and more globally orientated talent are entering the modern world of work, and the workforce will increasingly become diversified in terms of cultures and values. Consequently, commitment to team participation and management will become a priority. Managing this diversity will require core leadership competencies. Leadership skills will increasingly become important in driving a robust intercultural understanding to integrate and engage employees. In addition, the scarcity of skills and experience will require from organisations to establish a deep sense of loyalty in existing employees to retain highly demanded skills. In terms of employability, the need for educated and employable talent will continue to grow exponentially. Employees and graduates should utilise the opportunity to learn aggressively and continuously to secure a spot for them on the employable agenda (Frost and Sullivan Consultancy, 2015; Jackson, 2016; Vielmetter & Sell, 2014).

2.4.6 Megatrend 6: Technological Convergence

Technology adoption has been slow in the 3IR. However, it is predicted to increase rapidly over the next decade and transform the way in which people live and toil and organisations strategise. The market environment will become one of integrated form as technologies, products, and industries drive convergence. The subsequent result of technological convergence is expected to contribute to new product

markets and major innovative directions during the 4IR. Industries that do not prioritise innovation most likely will become obsolete. The benefit of convergence is found in the amalgamation of several products into one, which will still present all the individual benefits originally offered separately. Information and knowledge will become important commodities as the convergence of technology renders a convergence of competition. Hence, organisations will need to prioritise research and development funding in their financial plans. Simultaneously, the convergence will demand of organisations new methods and intensity of collaboration between value-chain stakeholders. Within the existing structures, organisations will have to manage immense collections of diverse knowledge and information while focusing on objectives and supportive processes. The free flow of information and optimal use of resources are important support structures. Partnering and collaboration will be top priorities for organisations to optimise and drive the required innovation. It is predicted that innovation, collaboration, and flexibility skills will be cardinal skill requirements in the 4IR era (Vielmetter & Sell, 2014).

For graduates and employees, the ability to form positive relations to enhance collaboration will contribute to their employability. They also need to broaden their horizons, as 'thinking outside the box' qualities will render an employability competitive advantage – as will the ability to adapt and self-develop new knowledge and skills (McKinsey Global Institute, 2018). In addition, individualism and different morals will render diverse views when technological advances, for instance, biotechnology, and ethical boundaries are often blurred (Frost and Sullivan Consultancy, 2015; Vielmetter & Sell, 2014).

To summarise, the 4IR revolution will have five main implications for the organisation, namely customer expectations, collaborative innovation, product enhancement, organisational forms, and skill requirements (McKinsey Global Institute, 2018; Schwab, 2016). This implies that organisations will have to consider new business models, skills, and organisational cultures as well as the way in which they do business. To do so, managers need to contextualise the unique effect of the megatrends on their organisational capital. On the other hand, graduates cannot depend only on HEI anymore to render them employable. Graduates and employees have the responsibility of self-development through continuous learning to ensure that their skills comply with the associated skills required by employers (Nillson, 2010).

The primary driver of research into the phenomena of employability has been the challenge presented by the employability gap. Established definitions of and approaches to employability were inefficient to address the skill challenges experienced during the 3IR and close the associated skill gap. The unresolved issues and skill gaps pose further challenges for employers in facing the 4IR. The next section will discuss the effect of the employability gap on employer requirements, as well as on the graduates.

2.5 THE EFFECT OF THE EMPLOYABILITY GAP ON ITS MAIN STAKEHOLDERS

The main stakeholders affected by employability are undoubtedly the unemployed graduates and employers. Changing market conditions give rise to organisations increasingly raising the bar in terms of

the skill levels required from graduate recruits. One of the critical implications of the 4IR is found in the existing skill gap where employers cannot fill vacancies or operate optimally due to inappropriate skill propositions. The challenge is further compounded by strong market competition for appropriately skilled individuals (Ullah, Mohamad, Hassan, & Chattoraj, 2019).

It follows from the discussion above that the market and organisational environments will become an increasingly complex system primarily driven by megatrends and a need for appropriate skills. Zimmerman, Woolf and Haley (2015), in Ullah et al (2019), advance that many organisations have become irrelevant during market changes because of their inability to recognise the dramatic changes in the socio-economic structures of global systems. The emergence of new markets, competition driven by technology, and an increased customer base with new relationship demands force organisations to reconsider the way they model their business, operational activities, and leadership practices. Organisations need to understand that the postulated megatrends are connected – which proposes a range of integrated opportunities. Hence, it is important to contextualise the elements of each global megatrend and its value chain to consider how its forces will affect skill propositions, processes, and profitability of organisations. Therefore, opportunities to maximise market share by means of appropriate strategic responses and changes to their organisational capital need to be considered and implemented.

Organisation capital is held as the key driver of organisational performance and success in a turbulent organisation (Van Harten, De Cuyper, Guest, Fugate, Knies & Forrier, 2017). In fact, it is presented as the reason for the existence of an organisation and the primary driver of growth (Eisfeldt & Papanikolaou, 2013). Lev, Radhakrishnan and Zhang (2009:275) describe organisational capital as the “mother of intangible assets”, which presents the assets of processes and procedures (Eisfeldt et al., 2013), the information held by employees (Bounfour, 2008), values and norms (Tomer, 1998) and human capital (Prescott & Visscher, 1980). Human capital is described as the relationship with stakeholders, attitudes and teamwork, qualifications, and employee experience (Edvinsson, 1997). The benefits of intangible organisation capital are linked to the unique core competitiveness offered by every organisation. Thus, organisational competitiveness is not only a representation of the creation of its market value, but also a reflection of its intangible organisational capital that drives performance (Bounfour, 2008; Wang, 2016). Organisational performance strongly hinges on its potential and current employees' employability capital, skills, and the capability to join hands effectively and interact positively. Primarily, the unique human capital offering, employees’ knowledge, skills, experience, and propensity to adapt are employed by organisations to create profits, growth, and competitiveness. The inability of graduates to adjust and upskill may result in lower productivity, employee engagement, safety behaviours, organisational profits, and market position (Di & Guo, 2010).

Earlier scholars, i.e. Meyer, Brooks, and Goes (1990) already reported that economic underperformance of organisations during industrial revolutions can potentially affect the ability of the economy to sustain global growth and competitiveness, resulting in an increase in the unemployability rate. The availability of

appropriate skills initiates from skill propositions internal (current employees) as well as external (graduates) to organisations. While employers can initiate suitable development initiatives to upskill existing employees, they are often presented with inadequately skilled graduates to comply with the basic required capabilities to add value to the organisation.

Unfortunately, many graduates also believe that the skills gained through academic curricula and projects, linked with previous experience, are sufficient to support employability. As indicated in the prelude to this chapter, this view is strongly contradicted by graduate experiences when seeking employment. Employers expect graduates to be work-ready with discernible demonstration of employability (Clarke, 2018). Therefore, it is no surprise that a recent study by Matsouka and Mihail (2016) reports a critical divergence between graduates' perception of employability readiness and the requirements of employers for the softer skills of emotional intelligence, learning orientation, self-development, ethics, and integrity (Forsythe, 2017; Smith, et al., 2014). While HEIs can offer knowledge on the softer skills, it remains the responsibility of graduates to practise and develop the softer skills demanded by employers. This can be achieved only through commitment of graduates to personal reflection and change (Mason et al., 2009).

Linking career paths to employability, Jackson and Wilton (2016) highlight that the time has arrived for graduates to take cognisance that market forces are changing at a rapid exponential rate, which continuously necessitates new competencies and skills. Graduates cannot live in ignorance any longer. They need to think holistically and understand the pressures that would guide their future. To ensure that their skills comply with the associated skills required by employers, they should adopt the practice of continuous learning. Given the critical importance of appropriate skills in the 4IR period, it would be irresponsible of unemployed graduates to focus solely on job-seeking during unemployment periods. Simultaneously, graduates need to broaden their horizons, understand the dynamics of the 4IR, and engage in experiences through learning, reflection, job shadowing, practical application of their newly acquired skills, internships, and even by contributing to societal empowerment projects. These activities will assist in developing employability potential of graduates, render a competitive advantage, and assist graduates in getting quality jobs and marketing for a relevant position. Those who choose not to grow through self-development will remain unemployed (Tomlinson, 2017).

Contribution to the study:

This section highlighted the need for graduates to have appropriate skills and abilities to be employable and support organisational growth during the 4IR. The information held by employees, their values and norms, relationships, and human capital form the core of the organisational capital that is responsible to generate competitive advantage and growth. Signalling capabilities in terms of these capitals to prospective employees will support graduate employability.

2.6 CONCLUSION

This chapter aimed to address the research question:

What are the drivers and challenges of employability?

The discussion departed by defining employability in terms of skills supply, and the employer skills need. Next, an in-depth overview was provided of the three drivers of employability, namely global market drivers, government policies, and industrial revolutions. The challenges of the 4IR in terms of its megatrends were discussed. The combination of interactions between the structural aspects ultimately results in an employability gap created by the skills deficit between HEI supply and employer demand. These factors will continue to affect employability as structural elements of economic interaction. The challenges of the skills gap for employers and graduates were considered. It was concluded that graduates, to be deemed employable, need to signal capabilities that would support the organisational capital of an organisation.

Chapter 3 addresses the argument raised in this study by contextualising graduate employability capital, its facilitators, purpose, and its development vehicles. The following questions will be answered: *What are the driving concepts and theories that define employability capital, and how can employability capital be developed*? The chapter considers the capabilities that graduates need to signal to be deemed employable. The methods to develop these capabilities are introduced briefly.

In Chapter 4, the derived capabilities are linked to the skills employers will need during the 4IR, with emphasis on soft skills. The following research question is answered in this section: *Which driving concepts, theories, and drivers define soft skills?* The chapter concludes the literature review with the presentation of a theoretical model to guide the empirical research phase.

CHAPTER 3

EMPLOYABILITY AS SIGNAL OF CAPABILITY AND COMPETENCY

3.1 INTRODUCTION

In Chapter 2, employability in terms of the study objective was defined, and the environment and drivers of employability as well as the employability gap were discussed. It was concluded that, to be deemed employable, graduates need to signal capabilities aligned with the organisational capital requirements for human capital knowledge, skills, experience, values, and norms.

This chapter will focus on the first portion of the study argument, namely graduate employability capital. Employability capital is a variant of the earlier employability- associated term 'movement capital'. While movement capital relates to the movement of individuals between jobs, Peeters, Nelissen, De Cuyper, Forrier, Verbruggen and De Witte (2019:80) postulate that employability capital more precisely describe employability in terms of the personal resources required to "capture the combination of obtaining and retaining employment" by developing capability and competency .

The chapter discusses what employability means in terms of employability capital, capability, and competency. The discussion then turns to the focus of the chapter to contextualise the employability capabilities needed by graduates to be deemed employable. The chapter concludes with a brief discussion on how employability capital can be developed to support transferal of the employability potential to competence and organisational performance. Hence, the following research questions are investigated in this chapter:

> Which driving concepts and theories define employability, and how can employability be developed?

The chapter layout is presented in Figure 3.1.

Chapter 3 Employability as capability and competency signal	Clarification of concepts
	Employability capital as the key driver of employability potential
	Human capital as driver of organisational performance
	Identity capital as the building blocks of soft skills development
	Psychological capital as facilitator of positive attitude and behaviour
	Social and cultural capital as drivers of human interaction
	Capability and competency approaches
	Development of employability capability for skill transfer in the workplace

Figure 3.1: Literature study layout for chapter 3

Source: Compiled by the researcher

This chapter is of specific importance, as it provides the foundation for the principal goal of this study, which is to develop an employer-specific competency framework that can be used for developing appropriate soft skill competency to satisfy the requirements of an organisation. Hence, important theories and models are examined to present a perspective on the integration of capabilities, competencies, and employability capital with successful workplace operations.

3.2 CLARIFICATION OF MAIN CONCEPTS

Prior to discussing employability, some prominent concepts need to be clarified.

3.2.1 Employability Skills

Similar to the diverse definitions of employability, employability skills are viewed in various contexts ranging from generic skills, abilities, key skills, enabling skills, capabilities, transferable skills, and differentiators to skilful practices. Most scholars include knowledge, technical skills, attitudes, and behaviours (non- technical skills) when referring to employability skills (Matteson et al., 2016). In terms of the current study, employability skills are defined as follows

> Employability skills are a range of cognitive and non-cognitive knowledge, attributes, behaviours, and competencies.

3.2.2 Graduate Capital

The concept of employability capital is often presented as a replacement term for what is described as 'movement capital', which represents the personal strengths and self-perception that individuals use to change employment (Forrier, Verbruggen & De Cuyper, 2015).

However, employability capital differs distinctively from movement capital in that it represents the personal strengths that enhance graduates' chances of getting employment and retaining it; thus, the employer's views (Peeters et al., 2019).

3.2.3 Hard Skills

Hard skills are described as cognitive and technical abilities that can be defined, taught and manifest in specific task-related performance capabilities that can be measured quantitatively. Hard skills refer to qualifications (Nillson, 2010) and the required capabilities to perform in a specific job (Tomlinson, 2017).

In support of the study objective, hard skills refer to cognitive and practical abilities defined as follows:

> Hard skills are the qualifications and learnt and practised skills required to perform a task successfully within quality requirements, as well as legislation, policies, and rules in support of the operational success of the entrepreneur or organisation.

The definition can be extended to entrepreneurs, as not all graduates will choose an organisational career path.

3.2.4 Soft Skills

Subjective, non-technical skills are referred to as soft skills in the literature. Soft skills are presented as enablers of employability due to their performance- enhancement effect on technical, career, and academic skills. Scholars describe soft skills as the building blocks of relationships and emotional capability to face organisational challenges and drive individual performance (Pandey & Pandey, 2015).

In Coetzee's (2012) view, soft skills are defined as the values, personality attributes, attitudes, and behaviours that direct graduate employability. Expanding on Coetzee's view, Lippman, Ryberg, Carney, and Moore (2015:4) incorporate the concepts of self-management and relations with others to describe soft skills as " a broad set of skills, competencies, behaviours, attitudes, and personal qualities that enable people to effectively navigate their environment, work well with others, perform well, and achieve their goals."

Guided by the mentioned literature views and Tomlinson's (2017) capital construct, the researcher defines soft skills in the context of the study objective as "the non-cognitive graduate capital that directs the

behaviour and attitudinal competencies required to establish lifelong learning and an innovative, high-performance work environment in support of organisational growth and market relevancy".

Tomlinson's (2017) graduate capital skills model will provide the point of departure of the soft skills capability.

3.2.5 Competency

Vathanophas and Thai-Ngam (2007:49) offer a popular definition of competency as "individual characteristic that can be measured or counted reliably, and that can be shown to differ significantly between superior and average performers or between effective and ineffective performers".

Linking competency to employability, Woodruffe (1991) describes competency as employers' required behavioural input expected from graduates. Lucia and Lepsinger (1999) argue that competency establishes when the transfer of knowledge, skills, and abilities is manifested through personal characteristics in behaviour and actions that contribute to organisational success and performance.

The Eskom Procedure for Development (2017:5) reports competency as "a mixture of skills, knowledge, work experience, and attributes required to perform a job/task to a defined standard and relates to the outcomes that would define effective performance".

Concerning this study, and drawing on the works of Lucia and Lepsinger (1999), the researcher adopts the following definition: "Competency is the knowledge, skills and abilities that establish through personal characteristics in behaviour and actions to satisfy the employers' requirements for the execution of organisational strategies, growth, and market relevancy."

The discussion of employability as a capability concept will begin with a discussion of employability capital.

3.3 EMPLOYABILITY CAPITAL AS THE KEY DRIVER OF EMPLOYABILITY POTENTIAL

Employers consider employability capital as the condition for employability potential, future performance, and organisational performance and growth during periods of change (Holmes, 2015; Williams, Dodd, Steele, & Randall, 2016)

Peeters, et al. (2019:3) introduce employability capital "as the various personal resources – or capital – that may impact individuals' employability". Described as a psychosocial construct, it is "formed through the dominant elements of career identity, personal adaptability and social and human capital" (Fugate, Kinicki & Ashforth, 2004:17), a set of individual personal capitals (Tomlinson, 2017), personal quality elements (Brown & Ryan, 2003), or identities (Holmes, 2001) that would secure employment.

Building on the work of the previous authors, Tomlinson (2017) argues employability capital is a meso-system that proposes relationships between the five personal aspects of capital, namely human, social,

cultural, identity, and psychological capital (PsyCap). In an empirical study, Ngoma and Ntale (2016) confirmed the interrelated relationships of career identity, social capital, and psychological capital in graduate employability.

Donald, Baruch, and Ashleigh (2019) equate employability capital to human capital and argue that it incorporates scholastic capital, psychological capital, social capital, market-value capital, cultural capital, and the skills associated with the realisation of the potential concept. However, Peeters et al. (2019) distinguish employability capital into human capital and social capital. The scholars argue that human capital is established in the individual, while social capital initiates through relationships with others.

Tomlinson (2018) contests Donald et al. (2019) and Peeters et al.'s (2019) views, arguing that human capital is a separate concept from the other types of capital and cannot be regarded as an umbrella term for all personal capital. He presents human capital as the harder concepts of knowledge and technical skills, while all other aspects of capital support the softer personal and social skills.

Although various conceptualisations have been afforded to employability capital, the current study bases its assumptions and arguments on the comprehensive employability capital model of Tomlinson (2017) presented in Figure 3.2. The model postulates that employability capital is represented by five separate types of individual capital, namely: human capital, psychological capital, identity capital, social capital and cultural capital.

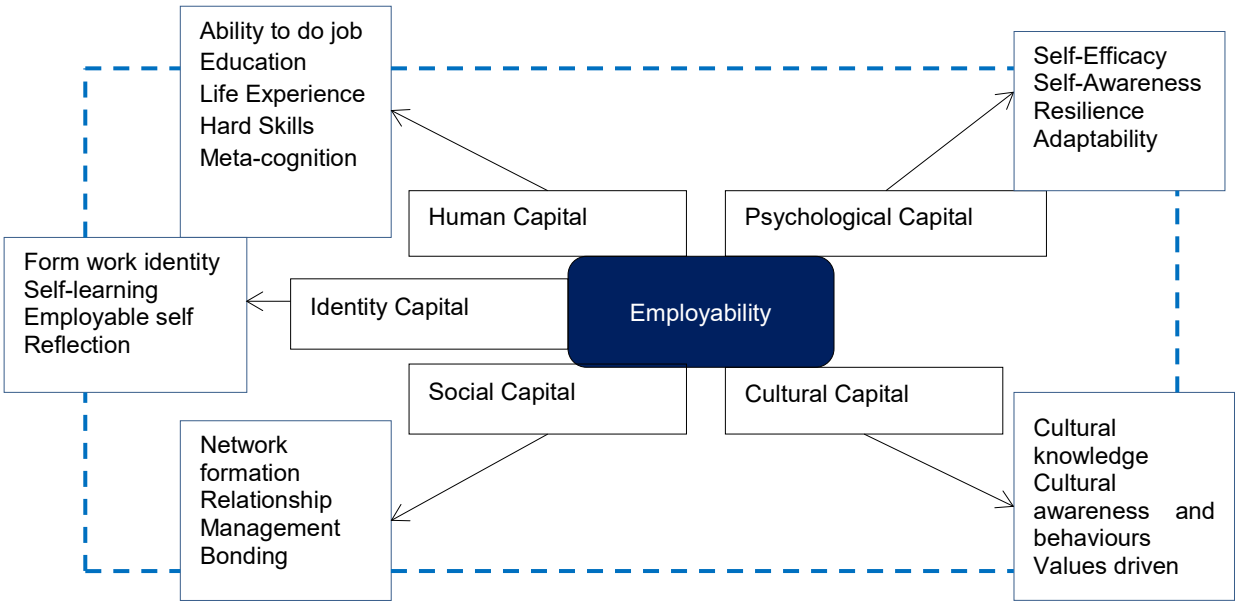


Figure 3.2: Employability capital model

Source: Adapted from Tomlinson (2017:340).

The next section provides a critical overview of human capital theory – a concept Tomlinson links to workforce readiness and technical skills. Its relation to the skill requirements of the workplace, the contexts

representing human capital, as well as the methods available for the development of human capital will be discussed.

3.3.1 Human Capital as Driver of Organisational Performance

Historically, human capital has been linked to knowledge. The idea is attributed to the resource-based theory that holds knowledge as the sole basis of competitive advantage (Grant, 1991). One of the earlier leading theories in explaining workforce readiness, human capital theory, postulates that education increases individuals' productivity and performance (Schultz, 1961). An argument raised by Hogan, Chamorro-Premuzic, and Kaiser (2013) holds that human capital is far more than just knowledge, as research study results, for instance, those by Ng, Eby, Sorensen, and Feldman (2005), found only a modest relationship between education accomplishment and career success.

Nowadays, views on human capital incorporate individual skills and attributes (McQuaid & Lindsay, 2005), occupational expertise and competency (Van der Heijde et al., 2006), degree subject knowledge (Pool et al., 2007), discipline-specific and generic skills (Bridgestock, 2009) and multiple identities (Gardner, 2011).

In an attempt to consolidate the various meanings attributed to human capital, Hogan, et al. (2013) describes it in a general sense as capabilities, skills, and common sense. Employers view common sense as the entrants' aptitude or approach to add organisational value and not so much as a soft skill (Lewis, 1992; Shafie & Nayan, 2010).

Peeters, et al. (2019:3) regard this description as too broad and distinguish human capital as knowledge, skills, attitude, and meta-cognition. Accordingly, human capital is contextualised as knowledge gained through the development of the functional, procedural, and systems thinking as well as the meta-cognitive skills required to perform in the workplace

Skills are generated from knowledge and classified in functional, procedural, meta-cognition, and system-thinking skills. Together, these skills manifest into the actions required for workplace performance. Functional and procedural skills refer to the technical application of learnt knowledge and the processes directing it. Many emergent works emphasise the importance of system-thinking skills in multifaceted environments. The ability of system thinking offers dimensional approaches for problem-solving, risk management, and decision making in difficult environments (Tomlinson, 2017). Therefore, it is provisioned that the 4IR will provide a sound platform for approaching challenges within the concept of system thinking. The process of system thinking is one of innovation where organisations treat problems as a subset of a system by looking critically at the whole system for system-integrated solutions. Such a process enables effective decision making, strategy alignment, and competitiveness. System thinking can be described as the skill capability to approach, consider, and examine information and circumstances through a due diligence process that would affect sound decision making and result in effective workplace performance (Clayton & Radcliffe, 2018; Palaima & Skaržauskienė, 2010).

Metacognition refers to the processes used to plan, monitor, evaluate, and review one's understanding and performance for continuous improvement (Teng & Zhang 2016).

Attitude refers to the favourable or unfavourable mental judgements and their motivations which individuals use to evaluate the self, others, objects, and issues, before deciding on a course of action or behaviour. Attitude formation occurs through beliefs, emotions, and values and manifests in behaviours. Within the interactive workplace, attitude forms the basis for workplace interactions and retaining customers (Hurrell 2016; Petty & Krosnick, 2014).

The value of human capital has extensive advantages in terms of both the organisation and individuals. The strength of human capital is found in formal education and how it renders the more advanced skills needed to consider the organisational system holistically, improve decision-making, and stimulate critical thinking to increase productivity (Melink & Pavlin, 2012). Properly developed human capital and positive attitudes lead to an increase in productivity, job satisfaction, increase retention rates, render both employee and client engagement, improve communication and organisational culture (Tony, 2017), job performance (Cai, 2013), increase service excellence (Aryee, Walumbwa, Seidu, & Otaye, 2016), and are critical sources of value and organisational performance (Crook, Todd, Combs, Woehr, & Ketchen 2011).

Notwithstanding the value and extended structure of human capital, the broader empirical research submits that human capital does not explain the potential required to support the softer, non-technical performance elements during the 4IR (Hurrell 2016; Williams, 2015; Wilton, 2014).

Contribution to the study:

Human capital is a critical **source of value, innovation, competitive advantage and organisational performance**.

The elements of human capital and their associated capabilities are summarised in Table 3.1.

Table 3.1: Linking Human Capital Dimensions to Employability Potential Signals

Human Capital Dimensions	Potential signal for employability as derived from the discussion
Knowledge	– Technical application – System thinking

	– Qualifications – Tacit knowledge
Skills	– Problem-solving – Decision making – Innovation
Meta-cognition	– Continuous improvement – Monitoring – Evaluation – Review
Attitude	– Beliefs – Emotions – Values – Behaviour

Source: Developed by the researcher.

The next sections bring focus to the softer elements of employability capital, commencing with consideration of identity capital.

3.3.2 Identity Capital as Building Blocks of Soft Skill Development

Identity capital is considered as the building blocks of soft skill development and can be described as the contribution of the 'self' to a positive workplace environment and organisational performance (Cimatti, 2016; Lewis, 2016).

Bridgestock (2009:37) offers a simplified and holistic view of identity capital as "the individual's perception [self-belief] and appraisal of themselves [awareness] in terms of values, abilities, interests, and goals".

It is argued that identity capital involves the characteristics, attributes, or personality traits of an individual. The attributes most regularly linked to identity capital are described as self-esteem (Henkel 2005), self-efficacy (Potgieter, 2012), personality (Myers & McCaulley, 1985), locus of control (Kokko, Bergman, & Pulkkinen, 2003), emotional literacy (Coetzee, 2011), and entrepreneurial literacy (Kusmintarti, Thoyib, Maskie, & Ashar, 2016).

Numerous theories are postulated with regard to the contextual elements driving identity capital. Given the substantial theoretical basket, the literature overview is limited to the theories most relevant to the study objective. The sub-constructs of personality, locus of control, self-esteem, self-efficacy, self-awareness, emotional literacy, self-management, and entrepreneurial literacy, as presented in Figure 3.3, will be examined to contextualise identity capital.

Figure 3.3: The attributes associated with identity capital

Source: Researcher's understanding based on the works of Côté (2016), Henkel (2005), Potgieter (2012), Myers et al. (1985), Kokko, et al. (2003), Coetzee (2012), Kusmintarti et al. (2016) and Tomlinson (2017).

Each identity capital attribute is interrogated separately in the next sections.

3.3.2.1 Personality

Amir, Naz, Hafeez, Ashfaq, and Dogar (2014:222) describe personality as "emotional reactions, attitudes and behaviours, the thoughts, feelings and actions that make a person distinctive". Jung (2014) argues that personality develops through a dynamic process of self-actualisation during an individual's life.

While personality refers to the human psyche, personality preferences seem to be partially liable for explaining individuals' job behaviour. Myers and McCaulley (1985) state these preferences as extraversion, introversion, sensing, intuition, thinking, feeling, judging, and perceiving. A significant relationship has been found between individuals' personality preferences and employability (Cole, Feild, Giles, & Harris, 2009; Potgieter, 2012). In fact, Heckman and Kautz (2012:3) posit, "Success in life depends on personality traits". Accordingly, employers indicate a particular interest in personality characteristics during recruitment interviews to determine the graduates' potential for organisational fit (Finch et al., 2016).

The characteristics or traits of personality have been researched extensively. The popular big five model postulated by Goldberg (1993) describes personality in five personality traits, namely openness, conscientiousness, extraversion, agreeableness, and neuroticism (Anglim, & Grant, 2016; Soto, 2018).

The five traits are explained through the views of Neal, Yeo, Koy, and Xiao. (2012), and Amir et al., (2014) as follows:

Openness is the ability to seek out new ideas and experiences, which is often linked to adaptability, innovation, and creativity.

Conscientiousness is indicated in scholarly works as the most consistent, non-cognitive predictor of workplace performance, including aspects such as being courteous, cooperative, tolerant, able to plan and execute and being organisation cooperative. This trait refers to the capacity for self-control and the ability to act effectively and with persistence in reaching goals. Trustworthiness, dependability, thoroughness, and a strong drive for success are often linked to conscientiousness.

Neuroticism refers to the state of irrationality. Individuals with high levels of neurotic behaviour are disposed to fixate on negative workplace experiences and accordingly suffer job dissatisfaction and an inability to cope with stressful situations. Graduates that present with low levels of neuroticism are stable, resilient, and dependable.

Individuals with a propensity to be extravert are assertive, relate well with others, are optimistic, and advance social relations across the organisation. The factor supports good working relations and teamwork.

Agreeableness relates to the ability of individuals to establish and sustain positive relationships. The qualities associated with agreeableness are compliance, empathy, likeability, kind-heartedness, thoughtfulness, cooperativeness, and trustworthiness. Individuals with a decreased level of agreeableness are often highly competitive and may tend to be hostile.

Empirically, it has been found that personality traits positively connect employability to graduates' general, cognitive, emotional, and behavioural engagement in the workplace (Senior, Reddy, & Senior, 2014).

Studies on personality highlight the attribute of self-identity or self-concept. Empirical evidence shows that self-identity is a significant indicator of behavioural intent and accordingly plays an important role in social interactions (Terry, Hogg, & White, 1999). Considered as the unique identity an individual awards to the self, self-identity is derived from previous experiences and is often viewed through the eyes of others (Rosenberg, 1981). Self-identity plays a significant role in forming a positive self-esteem and self-efficacy, which will be discussed later. A supporting locus of control can assist individuals in forming positive self-identity. The next section will direct focus to the attribute of locus of control.

Contribution to the study:

Personality traits connect employability positively to graduates' general, cognitive, emotional, and behavioural engagement in the workplace. Openness is linked to adaptability, innovation, and creativity. Conscientiousness is a non-cognitive predictor of workplace performance and includes the ability to control the self, act effectively, be resilient, trustworthy, dependable, thorough, and persistent in reaching goals. Extraversion supports good working relations and teamwork. Agreeableness is important to establish and maintain positive relationships.

3.3.2.2 Locus of control

Locus of control (LOC) is described as an essential factor in employability, as it directs how graduates would approach their tasks and the workplace environment in terms of attitude and behaviour. LOC is a significant predictor of well-being and can be differentiated into internal and external LOC (Pindek & Spector, 2016).

Individuals with an **internal LOC** have confidence in their abilities to manage their fate and control their external environments. They believe that with actions come consequences and will direct their behaviour accordingly to minimise negative consequences and take full responsibility for the outcome – whether positive or negative. Individuals with an internal LOC are often the go-getters, self-reflectors, problem solvers, innovators, and the employees that make things happen to the benefit of all. Individuals with an internal LOC and high self-efficacy have a lower propensity to perceive and interpret workplace situations as unfavourable. They present personality traits like conscientiousness and agreeableness are more motivated and susceptible to others' emotional needs, and eagerly engage in proactive activities. Various studies found that internal locus is positively related to positive work outcomes, social experiences, and increased motivation (Hosseini et al., 2016).

In contrast, persons with an **external LOC** perceive themselves as passive participants in life with no control over their fate or external environment. Anything that happens to them is the consequence of external factors, someone else's fault, or sometimes simply luck or fate. Those with an external LOC are often not trainable, harbour negative feelings, shift the blame, and complain much. Attitudes of persons with a high external LOC become occupational constraints that prevent individuals from performing optimally in their jobs.

Confirming the importance of LOC, a study by Hosseini et al. (2016) found a significant relationship between LOC, self-esteem, self-efficacy, emotional stability, and job performance. A significant correlation was also found between self-esteem and job performance. The vital role of self-esteem in forming identity capital is discussed in the next section.

Contribution to the study:

Locus of control (LOC) directs how graduates would approach their tasks and the workplace environment in terms of attitude and behaviour. This capability is a significant predictor of well-being, emotional stability and job performance.

3.3.2.3 Self-esteem

Self-esteem as a concept includes the aspects of cognitive capital discussed in the human capital concept. In addition, it adds the elements of effective and behavioural attributes. Accordingly, employers often use it during the recruitment process as a predictor of workplace behaviour and a signal of how individuals could/would respond to certain happenings (Battle, 1992; Hosseini et al., 2016).

Self-esteem, often referred to as self-confidence, can be described as a process through which individuals maintain positive or negative perceptions of themselves when benchmarking and measuring themselves against human standards, values, and morals (Fugate et al., 2004; Ismail, Ferreira, & Coetzee, 2016). The prominent scholar, Battle (1982, 1992), argues that self-esteem can be considered in the affective, cognitive, and social domains.

Affective elements refer to one's feelings about own mood, feelings, self-regard, confidence, self-worth, and emotional needs.

Cognitive competencies (psychological roots) include self-evaluations and a sense of self-efficacy and well-being. These dimensions include elements such as beliefs, perceptions, and personal experiences. Self-efficacy also includes the beliefs of own capability to deal with challenges and problems, recognise patterns, reason, analyse, and evaluate to make judgements

Social elements deal with the feelings that individuals experience when evaluating and comparing themselves through the eyes of others when scanning for social acceptance (Kernis, 2003; Potgieter, 2012).

High self-esteem is linked to potential for high performance and employability. In contradiction, low self-esteem results in feelings of inferiority, no sense of direction, depression, anxiety, and helplessness, which in turn result in low performance and employability. The development of self-esteem is regarded as a critical aspect on the agenda of employability (Hossein et al., 2016). Graduates with high self-esteem were found to have a corresponding higher level of emotional intelligence (Amir, Naz, Hafeez, Ashfaq, & Dogar, 2014; Gardner & Martinko, 2016). Optimal self-esteem establishes and reflects in self-efficacy, another critical dimension in employability potential (Potgieter, 2012) and has been shown empirically as a high predictor of readiness for work (Lau, Wilkins-Yel, & Wong, 2019).

Contribution to the study:

Self-esteem is a predictor of behaviour and is linked to high performance and employability potential. In addition, it gives an indication how people could/would respond in certain circumstances. Self-esteem is considered in the three affective, cognitive, and social domains. Graduates with high self-esteem often portray a corresponding higher level of emotional intelligence.

3.3.2.4 Self-efficacy

In the social cognition theory perspective, Bandura (1999b) advances self-efficacy as graduates' beliefs or judgements regarding their abilities to perform assigned duties and responsibilities. Goleman (2006) argues that effective performance is not only the outcome of positive self-esteem, but primarily also entails the self-belief one has to apply skills successfully.

According to Bezuidenhout (2011), self-efficacy is the ability to persevere (be resilient) during challenges and organisational changes. Perseverance entails working persistently towards solving challenges and completing work activities and is directly responsible for high achievement (Howe, 1999). The social cognition theory argues that personal factors and self-efficacy are significant cognitive variables that regulate individual functioning in a dynamic environment. This notion implies that self-efficacy plays a dual role within the employability framework. Firstly, it awards individuals personal functioning status as the foundation of skill competence. Without self-efficacy, an individual would not be able to function within the organisational dynamics. Secondly, it was derived empirically that self-efficacy is an outcome of self-awareness, problem solving, and interpersonal relations (Bandura, 1986).

As directed by the self-determination theory of Ryan & Deci (2000), employee wellness is a critical element of self-determination as it directs the psychological requirements of competence, autonomy, and relatedness. Self-efficacy is the outcome of self-determination and relates to being able to manage tasks, direction of behaviours, social integration in support of team participation, intrinsic motivation, personal awareness, and self-management effectively (Ryan & Deci, 2017).

In addition, self-efficacy involves the capability for decision-making. It supports the belief that effort will support organisational progress through employees' accomplishment of goals, meeting of deadlines, and independent operation (Oriarewo, Ofobruku, Agbaezee, & Tor, 2018). These characteristics indicate that self-efficacy is divided into two elements, namely cognitive and affective efficacy.

Cognitive efficacy refers to individuals' self-trust and confidence in the workings of their minds, their ability to reflect, reason, appreciate, learn from mistakes, consider choices, make decisions, cope with challenges, and perform activities successfully (Ebrahimi & Jahanian, 2014).

Affective efficacy denotes to an individual's confidence to self-regulate emotions. Moreover, it assists individuals to perceive, appraise, and express emotions and feelings accurately through articulate thought processes and to act appropriately accordingly. Hence, efficacy represents the emotional, functional skills

of an individual (Potgieter, 2012). It is not surprising that skills such as emotional self-awareness and interpersonal relations have been found to be significant predictors of self-efficacy (Abdolvahabi, Bagheri, Haghighi, &Karimi, 2012; Matthews, Zeidner, & Roberts, 2012). In fact, research shows an enhanced interrelationship between self-efficacy and self-awareness. Both aspects are important in developing affective emotions and emotional intelligence (Berger, Koenig, Mueller, Schmidt, & Schunk, 2016; Mahasneh & Thabet, 2016).

Contribution to the study:

The belief in graduates' ability to use their skills supports effective performance. Personal factors and self-efficacy regulate individual functioning in a dynamic environment. Without self-efficacy, an individual would not be able to function within the organisational dynamics. Accordingly, self-efficacy is regarded as the core competency of human effectiveness in the organisation. Self-efficacy and self-awareness are also held as the core initiators of affective emotions and emotional intelligence.

Given the importance of self-efficacy as an enabler of individuals' emotional functioning in the workplace, the role of self-awareness in forming identity capital is considered next.

3.3.2.5 Self-awareness

Self-awareness is described as the ability to, through self-assessment, recognise and understand own emotions, feelings, and moods, as well as how these aspects influence the self and affect others. This ability allows an individual to direct and control own behaviour in an expected and appropriate manner. Optimal self-awareness has been linked positively to growth in emotional maturity (Berger et al., 2016; Hillage et al., 1998; Mahasneh & Thabet, 2016). This notion supports self-awareness as a positive stabiliser of attitude and behaviour (Gibbons, 1983).

By means of the objective self-awareness theory (OST), Duval and Wicklund (1972: 3) describe self-awareness as "a mental representation of correct behaviour, attitudes, and traits measured against the socially accepted standards of behaviour". OST still dominates the research agenda today, as it recognises that individuals continuously measure themselves, their views, and behaviour against the perceived opinions of other individuals (Duval & Wicklund, 1972). The perception derived from others' views motivates individuals to use reflection and self-awareness as tools to direct their beliefs and behaviour to be acceptable in the eyes of others. Conscious self-awareness can be manipulated through self-reflection to regulate behaviour (Ryan & Deci, 2017).

In the self-determination theory (SD), self-awareness is argued in terms of mindfulness, which in turn initiates self-regulation and autonomy. Mindfulness concerns the individual's awareness of what is occurring both on an internal emotional and external environmental level at the same moment (Brown & Ryan, 2003). The created awareness allows individuals to understand their experiences and self-reflect. Through the

process of self-reflection, individuals can adjust their behaviour and values (self-regulation) to ensure that their perceptions and values are aligned with their behaviour. By integrating these simultaneous signals, autonomy (independence) occurs (Ryan & Deci, 2017).

While both theories advance the practice of awareness and reflection to regulate behaviour, the SD theory goes further and provides for the simultaneous awareness and consideration of external environmental factors and self-emotions. Such notion advances emotional stability and elimination of automatic responses and problematic behaviour not aligned with self or expected social values or norms. Through the optimal process of self-management, motivation, engagement, and ethical behaviour, value can be added to organisations (Williams et al., 2016). The next attribute to be examined relates to the elements of ethical behaviour.

Contribution to the study:

Self-awareness is a stabiliser of attitude and behaviour. Mindfulness allows individuals to understand their experiences and self-reflect. The practice of self-reflection assists individuals to regulate behaviour by adjusting their behaviour and values (self-regulation) to ensure that their perceptions and values are aligned with the expected behaviour. Self-awareness advances emotional stability and eliminate automatic responses and problematic behaviour. Self-awareness supports motivation, engagement, and ethical behaviour.

3.3.2.6 Emotional literacy

Emotional literacy is often used interchangeably with emotional intelligence. Yet, it presents more. It is associated with values, morals and ethics that include the psychological constructs of fairness, belief, egotism, duty, and acting for the better of all. Emotional literacy can be regarded as the individual's moral compass that directs ethical behaviour (Liau, Liau, Teoh, & Liau, 2003; Lotecka, 1974). Development of emotional literacy assists individuals to obtain the attitudes, skills, and traits required to live a well-balanced and ethically directed life (Ryan, 1986).

Moral equity is regarded as a key graduate employability potential measured by employers during recruitment interviews (Amir et al., 2014). It centres on the assessment of actions, behaviours, and decisions in terms of their ethical appropriateness, honesty, and fairness. Moral people express qualities of honesty, ethical behaviour, integrity, respect towards others, and hold themselves and others accountable (Brown, Treviño, & Harrison, 2005; Martin, Resick, Keating, & Dickson, 2009). The establishment of morality is a self-directed, lifelong social learning and sense-making process.

Based on an individuals' moral equity, ethical cognition is regarded as the psychological mechanism individuals use to make judgements (LaVan & Martin, 2007). On the other hand, the development and regulation of ethical behaviour and judgements is a consequence of leadership behaviour and subtle

messages conveyed by it. An emerging body of research offers support for a relationship between ethical leadership and employees' job-related attitudes and behaviour such as performance, commitment, workplace behaviour, and psychological safety. Resick, Hargis, Shao, & Dust, (2013) found that employees who are led by ethical leaders are more inclined to judge poor workplace behaviour as morally unacceptable and deeds of organisational citizenship as honourable and rightful. A significant association was found between ethical leadership and group- learning behaviour, which is explained partly by the groups' ethical behaviour and conception of justice (Walumbwa, Hartnell, & Misati, 2017).

The influence of morals and ethics is visible in the absence of it (Goleman, 1995). The lack of these constructs manifests in problematic and often criminal behaviour, for instance, theft, fraud, corruption, and workplace bullying, which can have an adverse effect on employee well-being, profits of organisations and reputation (LaVan et al., 2007).

The choice to act ethically is influenced by an individual's ability to control and manage him- or herself. Accordingly, the role of self-management in guiding identity is deliberated in the next section.

Contribution to the study:

Emotional literacy is the moral compass that directs ethical behaviour. It involves the attitudes, skills, and traits needed to live a well-balanced and ethically directed life. Moral equity relates to actions of moral appropriateness, justice, fairness, honesty, integrity, respect towards others, and accountability. Individuals use ethical cognition to judge the acceptability of acts and behaviour. The choice to act ethically is influenced by an individual's ability to control and manage him- or herself.

3.3.2.7 Self-management

Numerous perspectives have guided the concept of self-management, ranging from internal abilities to social behaviour constructs. Clarke (2018) describes self-management as personal awareness in terms of values, attitudes, abilities, aptitudes, interests and work-life balance. These elements inform how graduates approach their work and the outcomes they perceive to derive from it. In terms of this view, self-management can be described as the element of identity capital that establishes a personal drive to develop and reach goals. On the other hand, Van der Heijde (2014) argues that self-management is an amalgamation of graduate attributes and situational components in the behavioural domain, which would signal a holistic range of approaches to employability potential.

From an integrated view, the social cognitive perspective holds that self-management involves a multifaceted interrelation between motivational, behavioural, and social processes (Fugate et al., 2004). In simple terms, self-management can be described as the ability to control the self and motivation in various situations. Porath and Bateman (2006:185) define the concept as the: "processes that enable an individual

to guide his or her goal-directed activities over time and across changing circumstances, including the modulation of thought, affect, and behaviour".

The psychological sub elements of self-management are described as cognitive, motivational and metacognitive (Bandura, 1993). The cognitive elements refer to task strategies and activities. Self-efficacy represents the motivational aspect and refers to the belief of the individual to be successful in the job outcome. Metacognitive abilities include the ability to monitor and self-reflect on the outcome of an action and then adapt behaviour.

An employability- specific concept postulated by the career self-management model describes career self-management as a group of behaviours, motivational factors, coping mechanisms, and strategies employed by individuals to increase control over their careers (King, 2004). Shafie et al. (2010) describe self-management in terms of having personal vision and objectives, accepting accountability, assessing performance, and expressing individual ideas and vision clearly.

Key skills included in the self-management concept are initiative, organisation, and accountability. Initiative refers to the ability to self-start without waiting to be told, the drive, motivation, dedication, and self-belief to achieve goals, motivation, and resilience to drive goal completion and solve problems. Organisation refers to planning resources, including time and information. Accountability refers to accepting the responsibility for task outcomes and, when applicable, to take the blame when something goes wrong (Ramdass & Zimmerman, 2011).

The many perspectives describe self-management in functional and emotional functions. It involves the goal- directed behaviour, motivation, self-directed organisational and task- related skills, and adaptability in any social or work circumstances.

Contribution to the study:

Self-management concerns the personal drive and motivation to develop and reach goals through self-controlled behaviour and self-reflection in any work-related or social situations. It involves cognitive and psychological outcomes of initiative, organisation and accountability.

3.3.2.8 Entrepreneurial literacy

Entrepreneurial literacy is contemplated as the core driver of economic growth and competitive advantage in organisations (Mustapha & Selvaraju, 2015), and according to Schwab (2016), would be a key driver in the 4IR. The capacity to explore value-added adaptations to existing products and services and simultaneously exploit new products and services, is vital for organisational growth and survival (Fang, Lee, & Schilling, 2010).

Generally, entrepreneurial orientation is referred to as being interested in new business opportunities or new product development. However, in spite of the common misconception that entrepreneurial literacy relates only to the entrepreneurial activities when establishing a new business opportunity, entrepreneurial literacy adds major value in existing organisations. In the workplace, entrepreneurial literacy relates to developing new products , being receptive to new concepts, and being excited about changes experienced in the workplace (Bezuidenhout, 2011).

A study by Stuetzer, Obschonka, Davidsson, and Schmitt-Rodermund (2013:1183) found weak, inconsistent, and statistically insignificant relations between human capital and entrepreneurship. While numerous studies tried to find the missing elements that drive entrepreneurial literacy, little consensus exists. The latest thought processes link entrepreneurial skills to the identity and social capital attributes of internal locus of control, need for achievement , creativity, social networking, risk-taking, and ambiguity tolerance, which are highlighted briefly next to contextualise their role in entrepreneurial thinking (Kusmintarti et al., 2016).

Internal locus of control in the entrepreneurial concept refers to individuals' ability to take responsibility for their behaviour and actions. High self-confidence and self-efficacy are among the vital factors that influence entrepreneurial literacy (Karabulut, 2016).

Need for achievement can be linked to a personal desire to be the best and outperform others. In the workplace, this trait indicates the potential for passion, enhanced performance, opportunity-focused and visionary behaviour, self-reliance, and a drive for excellence (Greenberg & Baron, 2008).

Creativity is the ability to generate new concepts, ideas, processes, or products and search for new opportunities. It also involves the aspects of critical thinking, advanced problem solving, and new ways of thinking. Creative graduates create new value and thrive on competition (Fini, Grimaldi, Marzocchi, & Sobrero, 2012; Scarborough & Cornwall, 2011).

Social networking refers to graduates' ability to (i) create, manage, and maintain advantageous networks and relationships; (ii) interact appropriately; and (iii) work in team relations. It is further held to be the process of gathering information, advice, and guidance from a bigger, expert platform (Zafar, Yasin, & Ijaz, 2012).

A risk-taking predisposition is associated with calculated risks and decision-making under uncertain conditions (Scarborough et al., 2011).

Ambiguity tolerance or adaptability is a trait that indicates how graduates find, perceive, and organise information during uncertain situations or times. This trait is critical during scenarios where decisions need to be made with limited information available. A graduate who demonstrates ambiguity tolerance tends to be more resilient to change and adapt more quickly to changing environments (Scarborough et al., 2011).

An important consideration is the gathering of knowledge through continuous learning processes. Market information and technological advances will influence entrepreneurial literacy increasingly. While current literature affords limited attention to this aspect, the 4IR will require that organisations direct urgent attention to the continuous learning of market influences.

Contribution to the study:

Entrepreneurial literacy is considered as the core driver of economic growth and competitive advantage. In the workplace, it relates to the development of new products, being open to new concepts, and feeling positive about the consequences of change. The identity and social capital attributes of internal locus of control, achievement need, creativity, social networking, risk-taking, and tolerance of ambiguity are considered as the dominant attributes in entrepreneurial literacy.

In conclusion, identity capital involves complex interrelations of attributes and self-identities that form the basis of developing soft skill competency.

Concise summary of identity capital contribution to intern employability:

Identity capital is considered as the building blocks of soft skills development. In addition, it represents the contribution of the 'self' to success in the workplace. Personality arranges the engagement of an individuals' cognitive, emotional, and behaviours in the workplace activities. The personality construct of self-identity is a significant predictor of behavioural intent and plays a crucial role in social interactions.

A locus of control (LOC) directs how graduates would approach their tasks in terms of attitude and behaviour. LOC is a significant predictor of well-being, emotional stability, and job performance

Self-esteem predicts behaviour and is linked to high performance.

Self-efficacy is also linked to effective performance, as it regulates individual functioning. It is regarded as the core competency of human effectiveness and initiates affective emotions and emotional intelligence.

Self-awareness is regarded as a regulator and stabiliser of attitude and behaviour, as well as an initiator of affective emotions, emotional intelligence, and ethical behaviour.

Emotional literacy is the moral compass that directs ethical behaviour.

Self-management concerns the personal drive and motivation to develop and reach goals through self-controlled behaviour and self-reflection. It involves the cognitive and psychological outcomes of initiative, organisation, and accountability.

Entrepreneurial literacy is contemplated as the core driver of economic growth and competitive advantage.

The attributes contributing to identity capital potential as a comprehensive concept are summarised in Table 3.2 below.

Table 3.2: Linking Identity Capital Traits to Employability Potential Signals

Trait	Elements	Potential Signal for Employability		Trait	Elements	Potential Signal for Employability	
Personality	Openness	Adaptability Innovation	Creativity	Entrepreneur literacy	Creativity	Creativity Initiative	Search new opportunities
	Conscientious	Courteous Tolerance Self-control Trustworthy Dependable Thorough	Effectively Cooperate Planning Effective execution Persistence		Need to Achieve	Passion, Enhanced performance, Opportunity-focused	Self-reliance Drive for excellence Visionary
	Neuroticism	Irrationality Fixate on the negative Dissatisfied	Not able to cope with stress Undependable		Social networking	Ability to manage and maintain relationships	Teamwork Information gathering
	Extraversion	Assertive Relate well with others Optimistic	Promote social relations Team player		Risk Taking	Risks decision-making	Adaptable
	Agreeable	Compliant Empathetic Kind-hearted.	Thoughtful Cooperative Trusting Likeable		Ambiguity tolerance	Ability to manage uncertainty	Tolerance Resilient
Locus of control	Internal locus of control	Emotionally stable Go-getter Self-reflecting Accountable Responsible Innovative Problem-solving	Positive Self-motivating Consider others Agreeable Proactive Self-regulating	Emotional literacy		Ethical propensity Judgement Morals Fairness Egotism Sense of duty Honesty Lifelong social learning	Ethical behaviour integrity Respect towards others Be accountable Sense-making
Self-esteem	Affective	Self-regard Self-worth	Confident	Self-efficacy	Cognitive	Ability to think understand and reason Decision making	Coping with challenges Learn from mistakes Problem solving
	Cognitive	Beliefs, Perceptions Self-reflection	Capable to deal with challenges Make sound judgements		Affective	Confidence Self-regulation Lifelong learning	Emotions and feelings Contribute to problem-solving Persevere
	Social	Need for social acceptance		Self-management	Career	Self-motivation Planning Dedication Personal drive	Goal orientated Flexible Adaptable Goal setting
Self-awareness		Attitude-behaviour consistency Reflection Act responsible	Ethics and morals fairness, belief, egotism, duty		Self-regulation	Self-control Self-motivation Meta-cognition Initiative	Organisation Accountable Dedication Self-drive

Source: Developed by the researcher based on the works of Bezuidenhout (2011), Bandura (1999a), Goleman (2006), and Tomlinson (2017).

Organisations survive and prosper by maximising the utilising of their employees' identify capital (Seval & Caner, 2015). In the positive psychology sciences, this approach is referred to as positive organisational scholarship (POS). Briefly, POS considers human excellence and how it renders exceptional organisational performance on an organisational level. On a micro level, psychological capital (PsyCap) refers to individual capital that can be developed and measured (Luthans, Youseff, & Avolio, 2007). While identity capital is discussed in the difficult- to- develop traits philosophy, PsyCap is classified as a facilitator of the behaviours and attitudes determined as outcomes of identity capital (Luthans, Avey, Avolio, & Peterson, 2010). PsyCap is examined in the next section.

3.3.3. Psychological Capital as Facilitator of Positive Attitude and Behaviour

PsyCap is derived from the positive organisational behaviour (POB) concept. Complementary to POS, POB is described by Luthans (2002: 59).as "the study and application of positively orientated human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace". PsyCap was determined empirically as a sub-element of the POB concept and principles (Luthans, et al., 2007). It was also found that it contributes significantly to organisational and individual performance, excellence, success, profits, and reputation (Luthans et al., 2010).

PsyCap is clarified in terms of 'who you are' (i.e. identity capital) and considers 'who you are becoming' and your 'best self' through the principle of lifelong development (Luthans, et al., 2007: 20). Thus, PsyCap can be regarded as an integrated construct of an individual's strengths and qualities, which makes it a significant form of capital to survive the demands of the 4IR workplace. PsyCap resources of individuals will assist them to maximise their abilities to adjust and respond proactively to the challenges posed by market changes. In addition, it enables them to self-motivate and to be resilient during times of adversity and stress and make a favourable impression (Anglim & Grant, 2016; Tomlinson, 2017).

Luthans et al. (2007:3) define PsyCap as "an individual's positive psychological state of development that is characterized by (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (Luthans, et al., 2007: 3).

The PsyCap elements are deemed critical meta-competencies when considering employability during the 4IR (King, Newman & Luthans, 2016). Hope can be described as a favourable motivational position derived from a sense of success, goal-directed energy, and intent to meet planned goals, irrespective of challenges encountered. Efficacy enables a sense of risk-taking and an appreciation of demanding challenges. This attitude leads to an important concept of passion, enjoyment and employee satisfaction

required to thriving and driving the complexity of the organisational environment (Goleman, 1995; Schwab, 2016). Optimism allows individuals to see and consider adverse events as experiences that could lend opportunities for improvements and growth (Youssef-Morgan & Luthans, 2015). Resilience is described as a critical competency in times such as the 4IR (Forsythe, 2017; King et al., 2016) as it gives individuals "the capacity to rebound or bounce back from adversity, conflict, failure or even positive events, progress and increased responsibility" (Luthans, 2002:702). Recently, Tomlinson (2017) added the capability of perseverance to workplace changes. Schreuder and Coetzee (2011) include the entrepreneurial literacy of risk-taking and self-confidence as elements of resilience. In addition, emotional intelligence is described as an antecedent of resilience (Armstrong, Galligan, & Critchley, 2011).

De Grip et al. (2004) added willingness as a PsyCap meta-competency, maintaining that individuals are not passive participants but need to make a personal choice to participate in self- development. The willingness to engage in development, personal motivation to change, willingness to move across job roles, and willingness to be functional and flexible are critical components of this capital development.

PsyCap and well-being are facilitated and supported by what is deemed meta-competencies (Gallaghar & Lopez, 2009; Youssef-Morgan et al. 2015). The competencies include the elements of emotional literacy, self-efficacy, self-knowledge, self-evaluation, adaptability, flexibility (agility), resilience, lifelong learning, achievement drive, self-reliance, optimism, conscientiousness, and a sense of purpose that create optimal value to the organisation (Coetzee, 2008; Gupta, Shaheen, & Reddy, 2017; Hogan et al., 2013; Van Hercke, De Cuyper & Peeters, 2014).

A significant contribution of PsyCap is that it facilitates positive work attitudes and behaviours (Avey, Luthans, & Youssef, 2010), supports stress related situations, and assists in facilitating change (Avey, Luthans, & Jensen, 2009). According to Gupta et al. (2017), organisational citizenship behaviour (OCB) is of critical importance for organisational productivity and efficiency. As a sub element of PsyCap, it encourages engaged individuals to go the extra mile. The notion then holds that employees with a high level of OCB dedicate themselves physically, cognitively, and emotionally in their work activities. In fact, Di and Guo (2010) argue that adaptability is one of the significant drivers in support of organisational performance.

Even though OCB focuses on maximising organisational efficiency, it also changes normal performers to significant value contributors (Podsakoff, Whiting, Podsakoff & Blume, 2009). Adding to the list of advantages, Luthans, Youssef-Morgan, and Avolio (2015) argue that workplace creativity, mindfulness, gratitude, emotional intelligence, spirituality, authenticity, dedication, and courage are direct derived benefits of OCB.

Research results indicates a significant relationship between PsyCap and the identity capital elements of self-awareness and personality traits, namely conscientiousness, attitudes, commitment, individual

behaviour, and performance (Avey et al., 2009; Luthans et al., 2007). Accordingly, the development of PsyCap is regarded as a core requirement for supporting soft skill competency behaviour.

Contribution to the study:

PsyCap offers graduates the personal tools to survive the demands of the 4IR workplace. PsyCap resources maximise the abilities to adjust and respond proactively to challenges, self-motivation, resilience through development, and facilitates positive work attitudes and behaviour. PsyCap contributes significantly to the performance excellence, profits, success, and reputation of the organisation.

The dimensions of PsyCap are linked to employability potential in Table 3.3:

Table 3.3: Linking psychological capital dimensions to employability potential signals

Traits of Psychological Capital	Potential Signal for Employability	
Reflective practices	Continuous improvement practices	Evaluation Continuous learning
Lifelong learning	Continuous learning Proactiveness	Self-development
Career self-management	Networking	Personal goals setting
Adaptability	Appreciate change Effective team participation	Leadership for change Team support
Resilience	Focused Ability to manage adversity, conflict, failure positively Challenge management	Conflict management Self-confidence Persevere
Flexibility	Accommodate other views	Work across functionalities or departments
Hope	Intent to meet planned goals irrespective of challenges encountered.	Goal- directed energy
Optimism	Embrace opportunities for improvements and growth	
Willingness	Personal motivation to change or help	
Organisational citizenship behaviour	Dedication to go the extra mile	Loyalty

Source: Based on works of Luthans, Youseff & Avolio (2007), Youssef-Morgan & Luthans (2015).

Having examined the building blocks of soft skill competencies and the facilitators of attitude and behaviour, the investigation now turns to the drivers of workplace interaction, namely social and cultural capital. These drivers are also considered the foundation of organisational competitive advantage.

3.3.4 Social Capital as a Driver of Human Interaction

Social capital describes positive human interaction between the workplace, external customers and stakeholders. This capital was identified to define the interrelationships between humans in the workplace and employability potential (Hinchliffe et al., 2011). Social capital is indicated as critical elements in support of organisational survival during the 4IR (World Economic Forum, 2017; McKinsey Global Institute, 2018). The essence of social capital needs to be conceptualised.

Battle (1992) argues that the social capital dimensions are located within the socially constructed emotions derived from acceptance, evaluation, comparison, and efficacy, which are initiated through self-awareness, relationships and networks with others.

Grootaert and Van Bastelaer (2002:4) earlier defined social capital as “the institutions, the relationships, the attitudes, and values that govern interactions among people and contribute to economic and social development”. Adler and Kwon (2002) add the element of social network goodwill, and Tomlinson (2017) ads relationship management and bonding in a subsequent explanation of social capital. Jackson (2015) expands on a previous employability soft skill framework developed by Jackson and Chapman (2012) and includes the requirement of social responsibility to the social capital mix. Existing literature focuses primarily on four classifications within the social capital concept, namely emotional intelligence, networks, social literacy, and social intelligence. Next, these elements are discussed individually for conceptualisation.

In recent years, social responsibility as a social capital dimension has stepped to the fore increasingly as an important societal and stakeholder requirement for organisational image and associated success. Earlier defined by Carroll (1979:500), social responsibility is argued to “encompass the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time”. Social responsibility involves matters such as child labour, ethical behaviour, honesty, integrity, transparency, compliance with legal requirements, and societal upliftment programmes (Jackson, 2015).

Mayer, Salovey and Caruso (2000) describe emotional intelligence as the capability to perceive, reflect on, process, integrate, understand, and manage emotion. Goleman (1998:317) postulates his popular version of emotional intelligence as “the capacity for recognising our feelings and those of others, for motivating ourselves, for managing emotions well in ourselves and our relationships”. Goleman (2006) suggests emotional intelligence incorporates the three elements of self-awareness, self-management, and motivation, which provide the bridge from the ‘self' to the social environment.

Bar-on (1997, in Boyatzis, 2009:757), describes emotional intelligence in the workplace space as an individual- directed “ability to recognise, understand, and use emotional information about oneself that leads to or causes effective or superior performance”.

In terms of employability potential, Serrat (2017:330) advances emotional intelligence as the "missing link that unites conventional 'can do' ability determinants of job performance with 'will do' dispositional determinants" through the social and cultural domains. The view founds support in recent works of Oriarewo et al. (2018), who postulate that performance is a product of emotional stability generated by the identity capital elements.

Boyatzis, Goleman and Rhee, (2000:3) argue "emotional intelligence is observed when a person demonstrates the competencies that constitute self-awareness, self-management, social awareness and social skills at appropriate times and ways in sufficient frequency to be effective in the situation".

The long-standing Goleman-Boyatzis model of emotional competency gives direction on which competencies are encompassed in emotional intelligence. The model divides the competencies into personal and social competence categories. While personal competence relates to the recognition of self-awareness element and regulation through self-management, social competence relates to environmental recognition through social awareness and control by managing relationships. The model proposes 27 attributes that would support emotional Intelligence, as presented in Figure 3.4.

	SELF Personal Competence	OTHERS Social Competence
RECOGNITION	Self-awareness Emotional self-awareness Accurate self-assessment Self-confidence	Social awareness Empathy Service orientation Organisational awareness
REGULATION	Self-management Self-control Trustworthiness Conscientiousness Adaptability Achievement drive Initiative	Relationship management Diversity management Developing others Influence Communication Conflict management Leadership Change catalyst Building bonds Teamwork and collaboration

Figure 3.4: Goleman-Boyatzis model of emotional intelligence

Source: Adapted from Navas and Vijayakumar (2018:2)

The attributes included in the personal competencies are argued to be self-awareness, self-assessment (reflection), confidence, self-management, self-control, trustworthiness, conscientiousness, adaptability, achievement drive, and initiative. The potential generated by these personal competencies would provide a platform for effective social interaction and relationships. In addition, Blackmore (2011) argues that organisational change and support for it are derived from emotional intelligence leadership and affective factors.

The attributes linked to social competencies are described as empathy, service orientation, organisational awareness, developing others, influence, communication, conflict management, leadership, political awareness, being a change catalyst, building bonds , teamwork, and collaboration. These competencies assist in creating conducive working environments, generate less stress in terms of destructive conflict, generate team cohesiveness, and build trust and, social and cultural tolerance, increase job performance, and assists in gaining a competitive advantage. Additionally, it offers the benefits of collaborative support, performance improvements, innovation, continuous improvement practices and learning, open communication that develops trust relations, responsible risk-taking, and economic balance (Ferris, Perrewé, Anthony, & Gilmore, 2003; Mayer, Caruso, & Salovey, 2016; Serrat, 2017). However, Rambaldi, Kyem, McCall, and Weiner (2006) warn that information exchange is a two- way street with participation and proper communication requirements. Social competencies can be enhanced only through participatory voices.

According to an empirical study concluded by Ngoma et al. (2016), an advantage of social capital is that it mediates the relationships between psychological capital, career identity, and employability (Tomlinson, 2017; Whelan, McGilloway, Murphy & McGuinness, 2018). Experimental studies found significant positive correlations between emotional intelligence and self-esteem (Brown & Ryan, 2003; Schutte, Malouff & Simunek, 2002), between emotional intelligence and self-esteem in higher workplace performance (Brown & Ryan, 2003), between emotional intelligence, high self-esteem, lifelong learning, moral citizenship, and adaptability attributes (Ismail et al., 2016)' and employability as a direct and significant component of resilience (King et al., 2016.) An important study by Utami, Bangun & Lantu (2014) found that individuals with a high level of emotional intelligence have high organisational commitment, even in adverse organisational conditions.

Forming social networks and learning encourage the forming of networks or social groups to develop organisational opportunities. Membership of such network allows employees to draw from the information available in the network, practice the skills required to improve personal relationships, establish a tolerance for other's view and the capacity to work in teams (Chen, 2017). It is argued by Smith, DuBois & Krasny (2016) that collaborative social actions broaden the horizons of individuals through enabling shifts in thinking and influence. A study by Matsouka and Mihail (2016) identifies influence as one of the top skills required by organisations. Influence is a critical requirement to support workplace collaboration, cohesiveness, manage change, group motivation, customer satisfaction, and sales revenue (Serrat, 2017).

Social literacy involves the technical knowledge and interpersonal perceptiveness related to human behaviour and ability to manage conflict, know-how to communicate, and understanding of verbal and nonverbal expressions of others as well as sign language (Goleman, 2006; Lievens & Chan, 2017).

Thorndike (1920:228) theorises social Intelligence as “the ability to understand and manage men and women, boys and girls – to act wisely in human relations”. It centres on the individuals’ behavioural adeptness in social situations and interactions. The two elements of (i) social awareness and (ii) relationship management integrate to form social intelligence. Social awareness relates to the ability to emphasise, recognise the emotions of others in a given situation, and relate and react appropriately to their emotional needs. Relationship management entails social skills and know-how in managing relations and building network connections, finding common ground, and strengthening relationships (Goleman, 2006; Serrat, 2017). Social intelligence significantly increases an individual's competence and flexibility to manage personal, social, and environmental change successfully through positivism, consideration, empathy, and self-motivation (Lievens & Chan, 2017; Schlegel, Grandjean & Scherer, 2013).

The importance of social and cultural intelligence for organisations has been confirmed in studies finding that the effects of personality traits on job performance are moderated by social skills (Witt & Ferris, 2003) and develop managerial effectiveness (Semadar, Robins & Ferris, 2006). A report by McKinsey Global Institute (2018) emphasises the importance of the abilities to communicate, negotiate, and display interpersonal empathy and leadership qualities across a globalised and diverse spectrum during the 4IR. Goleman and Boyatzis (2008) describe the skill abilities associated with social capital as empathy, attunement, organisational awareness, influence, development of others, inspiration, and participation.

From the above-mentioned arguments, supported by the Goleman-Boyatzis emotional intelligence model, it is argued that social capital plays a significant mediation role in identity and psychological capital (Navas et al., 2018).

Contribution to the study:

Similar to emotional intelligence, social capital will play a dominant role in the 4IR era. Teamwork and relations form the foundation of organisational growth, customer satisfaction, good working environments, and a competitive advantage. Social capital is initiated through self-awareness, relationships, and networks with others. Emotional intelligence, networks, social literacy, and social intelligence are the elements of social capital.

In the domain of emotional intelligence, personal competencies would provide a platform for effective social interaction and relationships. Social skills moderate the effects of personality traits on job performance and play a significant mediating role in identity and psychological capital.

The attributes that would signal social capital potential are summarised in Table 3.4 below.

Table 3.4: Linking Social Capital Dimensions to Employability Potential Signals

Social Capital Traits	Social Capital Elements	Potential Signal for Employability	
Social network		Ability to form networks or social groups. Tolerance for others' view	Capacity to work in teams Collaboration
Social literacy		Social interaction Technical knowledge Interpersonal perceptiveness Human behaviour	Ability to manage conflict Communication ability, Understand verbal and nonverbal expressions
Social intelligence	Empathy	Understand others' motivations and needs.	Compassion
	Attunement	Understand others' moods and feelings.	Active listening.
	Organisational awareness	Appreciation of the cultures, norms, and values in the organisation	
	Influence	Positive communication.	Persuasion skills
	Develop others	Coaching and mentoring of others	Energetic
	Inspiration	Acknowledging others' valuable contributions Promotes a vision Encouragement	Establish group pride Fostering a positive client experience and a conducive environment.
	Team participation	Encourage participation Positive team task participation Support team members Cooperation and collaboration	Group motivation and building bonds Problem-solving Solicit input from others
Emotional intelligence	Perceiving emotion	Emotional self-awareness Accurate self-assessments Self-confidence	Manage own emotion Focus on non-verbal communication
	Facilitating thinking by using emotion	Self-management Self-control Trustworthiness Conscientiousness	Adaptability Achievement Drive initiative Negotiation
	Understanding emotions	Social awareness Empathy	Service orientation Organisational awareness
	Managing emotions	Leadership Appropriate communication Conflict management	Influence and change Developing others Catalyst communication

Source: Based on the works of Bezuidenhout (2011), Coetzee (2012, 2014), and Tomlinson (2017)

The final employability capital to consider is cultural capital, which is closely related to social capital. Cultural capital has been established as a critical, required capital driven by globalisation.

3.3.5 Cultural Capital as a Driver of Intercultural Human Interaction

Driven by ever-increasing cross-boundary business dealings, affirmative action policies, and woman emancipation, workforce diversification has dominated the workplace environment. An individual's ability

to sense, adjust, reason, and act suitably on cultural signals in the workplace has become increasingly important (Ng et al., 2009). The concept holds that awareness of development of cultural diversity and the ability to cross-cultural borders improves workplace cohesiveness significantly.

On the other hand, cultural intelligence can be described as an individual's ability to navigate successfully in social circumstances categorised by cultural diversity (Ang & Van Dyne, 2015). In essence, cultural intelligence deals with the judgements people make of one another based on diversity elements such as age, gender, religion, colour, financial status, affiliation and sexual preferences. The four-factor model of cultural intelligence postulated by Van Dyne et al. (2012) classifies cultural capital competence in the four dimensions of meta-cognitive, cognitive, motivational, and behavioural modification competence. The model argues that the aspects of meta-cognitive, cognitive, and motivation competence guide the mental capabilities to empower and drive cultural interactions. Behaviour modification refers to the communication approach.

The dimension of meta-cognitive competence involves proactive empowerment with knowledge and proactive planning to enable awareness of worldviews and judgements to facilitate adjustment of own understanding when interacting in culturally sensitive situations. The cognitive competency points to the cultural knowledge associated with the culture involved and the willingness to understand that perspectives differ between cultures.

Motivational competency relates to the self-belief in own abilities to engage positively in the interaction, enjoy, and value it. Cultural behaviour modification relates to using the mental knowledge, awareness, and motivational processes to adjust verbal and nonverbal behaviour to the facility and direct culturally appropriate interaction to minimise and prevent cultural conflict.

When testing the four-factor measurement, Ang, Van Dyne and Koh (2006) report that cultural intelligence significantly explains performance in a diverse workplace environment. The results also found that meta-cognitive and cognitive competencies significantly predict cultural judgment and decision making. While the motivational dimension significantly predicted adaptability in intercultural environments, the behavioural aspect was found to be associated with job performance and versatility in cross-cultural settings (Ang et al., 2006).

The advantages of cultural capital can be found in that they assist employers in managing workplace environments to alleviate conflict and prevent workplace dysfunctionality. Given the diverse workforce in the new world of work and the global market space, cultural capital has increased in importance (Ang et al., 2006).

In organisations, cultural intelligence plays a significant role in preventing barriers that can result in misunderstandings that undermine efficient and effective workplace exchanges. As culture is organisationally driven, it is important for graduates to consider that their skill demonstration should be

adjusted to the employer's requirements and types of vocation they seek to employ. To support the employer, the concept of embodied capital holds that cultural capital should be embedded in the behaviour, body language, and personalities of graduates. This would enable graduates to fit their cultural capital to any scenario in the workplace to create synergy. It would render cultural flexibility. For instance, while it is expected of a customer service agent to portray a variety of cultural skills, it can be assumed that an accountant would not need to have a diverse cultural skill set. Accordingly, the cultural fit between potential employers and graduates has become a prominent element in conceptualising employability and developing models (Jones, Mann & Morris, 2016; Tomlinson, 2012, 2017).

Contribution to the study:

In the integrated global workplace, cultural capital has become increasingly important, as it establishes cooperation and an effective and pleasant workplace. The ability to cross cultural borders significantly improves workplace cohesiveness.

The attributes of cultural capital are demonstrated in Table 3.5:

Table 3.5: Linking Social Capital Dimensions to Employability Potential Signals

Cultural Capital Elements	Potential Signal for Employability as Derived from Discussion
Meta-cognitive	Proactively plan cultural interaction. Awareness of own cultural judgements and views. Adjust understanding of others' cultures.
Cognitive	Cultural knowledge Appreciation for different cultural views.
Motivational	Enjoy cultural interaction. Positive attitude towards cultural interactions
Behavioural modification	Positive communication. Modify speech appropriately in conflict situations. Consider verbal and non-verbal communication and redirect their behaviour.

Source: Developed by the researcher from the works of Ang et al. (2006)

To summarise, various individuals' capital comes together to form employability capital. Significant positive relations between the various forms of capital and employability have been determined in empirical studies. For instance, an exploratory study by Mashigo (2014) shows significant positive relationships between emotional intelligence, PsyCap, and work readiness. However, the same study could not find significant correlations between social capital and work readiness. A later study by Das and Rao (2016) confirms social intelligence as an element of employability. Jackson and Wilton (2016) report the significance of self-management in enhancing graduate identity.

In the same vein, Peeters, et al. (2019) argue that employability capability and competency are driven by the employability capital of an individual. The next section examines the theories and models in literature used to explain the role of capability and competency in employability.

3.4 CAPABILITY AND COMPETENCY APPROACHES

Literature indicates three major approaches considered by organisations when evaluating employability, capability, competency and performance. From an education perspective, all three approaches can be linked to the graduate supply side and the future graduate outcome. However, competences also can be linked to the workplace environment as behavioural outputs (Tomlinson, 2018). Even though these approaches seemed to be presented as individual approaches in literary works, none of them should be considered superior to the other. In fact, it would be more accurate to consider them as complementary in nature, as is reflected in Hogan et al.'s (2013) model of determinants of employability. Presented in Figure 3.5, the model holds that for employers, employability revolves around three aspects, namely (i) social/interpersonal capability; (ii) competencies; and (iii) ambition, ethics, and performance drive. While social/interpersonal capabilities indicate potential teamwork capabilities, abilities and competencies indicate performance. Ethical behaviour, values, and performance drive indicate the willingness to add value to the organisation. The theory holds that a combination of these elements represents employability.

Hogan et al. (2013) postulate that capability manifest in a pleasant working environment and positive customer collaboration. On the other hand, competencies indicate an ability to perform the work while performance is an indicator of willingness to work hard and go the extra mile.

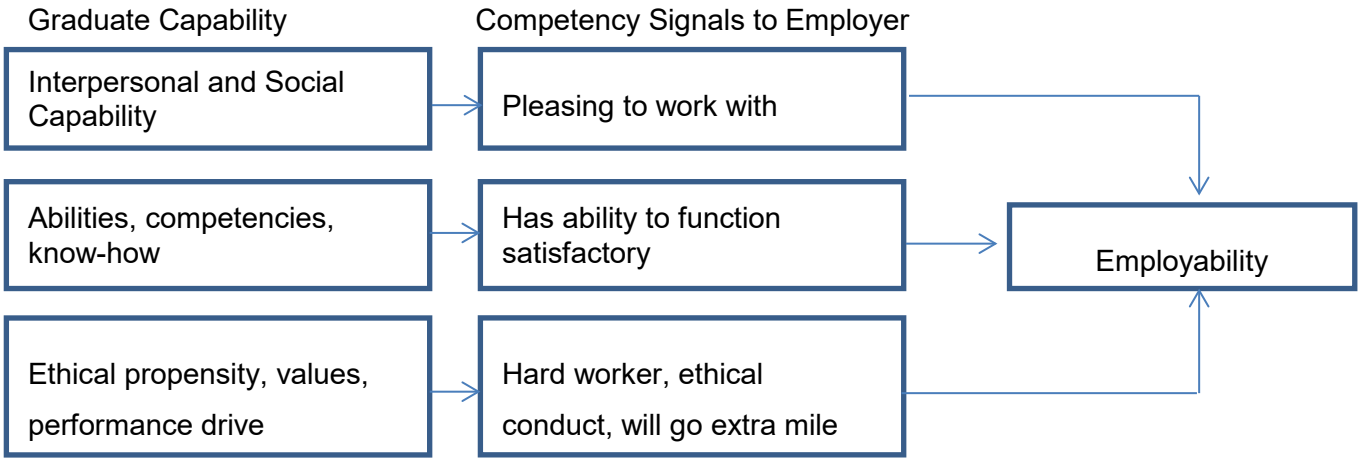


Figure 3.5: Model of determinants of employability

Source: Adapted from Hogan et al. (2013)

The two approaches of capability and competency are considered next with reference to their individual contributions to the success of organisations and the meaning of these approaches for employability.

3.4.1 Linking Capability to Employability

Capabilities are often described as the creator of wealth for organisations (Van der Klink et al., 2016), the essence of superior business processes, and the fundamental component in driving resources towards achieving a competitive advantage for the organisation (Mills, Platts & Bourne, 2003).

Schwab, (2016) argues that organisations can gain a competitive advantage through the attributes of human resources and capabilities in teamwork, collaborative networking, and relationship management. However, for organisations to remain viable and competitive, Teece, Pisano and Shuen (1997:517) present the concept of dynamic capabilities and describe it as the "ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments". Finch et al. (2016) link these abilities to an individual's conscientiousness, openness to experience, performance and verbal intelligence, interpersonal and organisational skills, job- specific skills, and knowledge.

Depending on the point of departure, various meanings can be linked to the capability concept. In the social justice theory, Sen (2009:233-235) defines capability as "our ability to achieve various combinations of functioning that we can compare and judge against each other in terms of 'what we have reason to value' and are 'in fact able to do'".

In the employability approach, capability is described as the ability to engage (Ilieva-Trichkova, 2014) and the individuals' personal identities (Hinchliffe et al., 2011). Furthering the concept, Van der Klink et al. (2016:74) describes capability within sustainable employability of employees as follows: "Throughout their working lives, workers can achieve tangible opportunities in the form of a set of capabilities… This requires, on the one hand, a work context that facilitates this for them and on the other, the attitude, and motivation to exploit these opportunities". The description not only highlights the importance of individual resilience and adaptability to the continuous changes in the organisation, but also emphasises the importance of developing employability competency in a conducive working environment.

In general, it is maintained that capabilities are derived from an individual's personal characteristics and capital and signify an individual's potential and ability to accomplish valuable outcomes. When applied in the work environment, capabilities render constructive work outcomes (Finch et al., 2016). In terms of graduates, Hinchliffe et al. (2011) advise that employers use the capability approach to consider graduates' skills potential for employability and readiness in the workplace. While capability links resources and processes to skills (Zehir, Acar & Tanriverdi, 2006), the concept of competence is often used in the context of organisational environment, survival, and differentiation factors.

3.4.2 Linking Competency to Employability

The concept of competencies primarily has been-orientated in relation to skill demands and presents an important indication of individuals' ability to obtain employment or for employees to retain employment (Tomlinson, 2018).

White (1959) introduced the term *competence* and describes it as the personality features that can be associated with high motivation and superior performance. Flowing from this idea, White (1959) conceptualises a general motivational theory, the effectance motivational approach, and links motivation directly to competency through efficacy. The uplifting emotional experience derived from efficacy brings about immediate motivation to deal with the workplace environment. The emotional gratification motivates individuals to direct their behaviour towards achieving competence. The approach emphasises the importance of leaders to create a conducive environment for learners and employees to experience efficacy.

Sultana (2009:21) describes a competent person as one who is "capable of combining – whether explicitly or tacitly – the different aspects of the knowledge and skills she/he possesses in response to challenges and situations as they arise in particular contexts". Understanding the main determinants of competency has long been a critical objective of scholarly works (Crook et al., 2011).

The significance of competency is found in its underlying characteristics and behavioural abilities required to render workplace effectiveness and employability success (McClelland; 1973), superior individual workplace performance (Peeters et al., 2019), as well as employee effectiveness (Holmes, 2001).

McClelland (1973) engineered the more modern thinking of competency with his argument that employers should test for competency instead of intelligence. McClelland (1973) describes competency as an individual's capability or ability to render effective performance. Embedded in this concept is the concept of intents that indicate that capability or ability manifest in behaviour that leads to competence (Boyatzis, 1982). Subsequent research in the modern world of work has framed competency in context of personality, emotions, motivation, and relationships. Within this view, Boyatzis (1982) defines competency as an inherent characteristic of an individual that, with intent, can result in effective and outstanding work performance. However, this view is held to be oversimplified.

Lucia and Lepsinger (1999) argue that the personal attributes of an individual must rather be regarded as a mediator of competency. Steeves (2010:33) points out that Lucia and Lepsinger expanded on these earlier views of competency and define competency as "the skills, knowledge, and personal characteristics as well as behaviours needed to perform a role effectively in an organisation and to help the business meet its strategic objectives". The challenge is that, while general approaches and frameworks abide in abundance, little agreement has been reached about which combination of competencies would optimise organisational success (Potgieter, 2012). In the following section, the more

popular competency approaches advanced by scholars, namely the KSA, core, behavioural, holistic, and learning approaches are discussed.

The KSA competency approach is one of the earliest and longstanding competency frameworks (McLagan, 1996). The framework attempts to clarify competency by dividing it into strict classes, as follows:

- Knowledge: A body of information obtained through both formal or informal education and that can be applied directly to the performance of a function or task.
- Skill: Skill is an observable ability to apply learning in order to perform a task or function.
- Abilities: Abilities refer to proficiency in a certain aspect.

In referring to Lucia and Lepsinger's (1999) competency view, it is evident that the KSA framework falls short in that it does not make provision for the elements of personal characteristics and behaviours. These elements are required to establish effective relationships that are regarded as critical determinants of organisational growth, sustainability, and competitive business advantage (Bandaranaike & Willison, 2015; Baartman & Bruijn, 2011). In addition, the framework is criticised for its rigid form of allocation, which may result in the marginalisation of individuals or groups across cultural boundaries (Van der Klink & Boon, 2002).

As globalisation established complexity in global markets, the core competency approach dominated the scene in an attempt to incorporate the unique and specific individual organisation competency set that would result in organisational competitive advantage. The core competencies were defined as "the collective learning in the organisation, especially how to co-ordinate diverse production skills and integrate multiple streams of technologies" (Prahalad & Hamel, 1990:4). The benefit of these core competencies is that they differentiate the organisation from its competitors. These competencies establish a long-term competitive advantage, as they enable organisations to solve problems and accomplish more at a quicker pace than competitors do (Foss & Knudsen, 2013). The advantage of this approach is found in its consideration of the complex interface and dependency of people, skills, and technologies involved in organisational performance and of the aspect of continuous learning throughout the process (Scarborough, 1998). However, this approach does not make provision for the general scholarly view that the behaviour of individuals directs personal and organisational success. Accordingly, attention shifted to consider the behavioural aspects of competency.

Spencer and Spencer (1993:9) describe competency as "an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation". Spencer and Spencer (1993:4) argue further that the underlying characteristics and behavioural abilities include "motives, traits, self-concepts, attitudes or values, content knowledge, or cognitive or behavioural skills – any individual characteristic that can be measured or counted reliably and that can be shown to

differentiate significantly between superior and average performers, or between effective and ineffective performers". This approach endeavours to determine the competency factors that would render a competitive edge by assuming an association between the cognitive and motivational aspects, such as presented in the iceberg competency model in Figure 3.6 and advanced by Boyatzis (1982) and Spencer and Spencer (1993). The model combines the KSA and core competency approaches but divides the individual competencies into technical skills and the personally hidden, non-technical characteristics of traits, motives, values, attitudes, and self-concept. It further presents that the softer elements of individual attributes and personality add quality to knowledge, and ultimately, are established in skills.

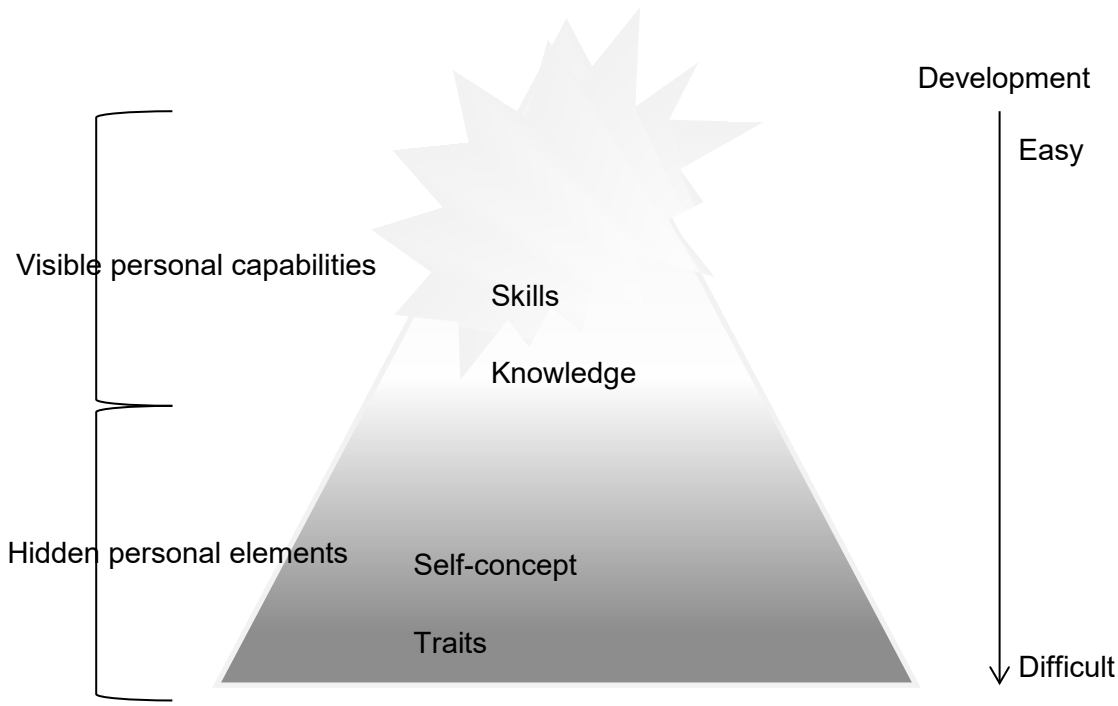


Figure 3.6: The iceberg model of competency
Source: Spencer and Spencer (1993:11)

Jackson and Wilton (2017) describe the softer elements, which often described under the umbrella term of personal characteristics, as follows:

> Motives, which are the motivational factors that direct individual action towards goals.
>
> Traits, described as the mental, intellectual, social, emotional, cultural, and cognitive characteristics and reactions to any given scenarios or information.
>
> Self-concept, which refers to the intrinsic elements of values and self-image.
>
> Attitude is a positive or negative view relating to an object, situation, person, or issue.
>
> Attitudes consist of three sub-components, namely the affective (feelings), behavioural (action), and cognitive (beliefs and views) categories.

Goleman (1998) raised a ground-breaking concept when he included the concept of emotional intelligence in the behavioural competency approach. He raised a significant argument that intelligence is not a fixed disposition with which individuals are born, as was always believed. In contradiction, behavioural competencies can be learnt through individuals' purposeful actions to change their behaviour, moods, and self-image through emotional intelligence in considering the self-emotions and those of others. Goleman (1988) describes emotional intelligence then as the facilitator of competency behaviours.

Building on Goleman's concept, Boyatzis (2008) postulates a more flexible framework, namely the emotional and social intelligence competency (ESC) model. The model combines the three behavioural competencies of emotional intelligence, social intelligence, and cognitive intelligence. In this model, emotional intelligence competency is described as the "ability to recognize, understand, and use emotional information about oneself that leads to or causes effective or superior performance" (Boyatzis, 2008:8). Social intelligence is described similarly as emotional intelligence competency, except that it refers to relationships with 'others'. Cognitive intelligence competency is described as "an ability to think or analyse information and situations that leads to or causes effective or superior performance" (Boyatzis, 2008:8). Emmerling and Boyatzis (2012) expanded the model to include cultural intelligence in the ESC framework. Notably, they argue that competency is not equal to capability, as capability only gives an indication of future competency potential, while competency directs performance quality. The psychological constructs of motivation and intent (emotional intelligence) behind the capability are an indication of future competency and positive organisational outcomes. Thus, the framework holds that the unconscious traits and motives result in behavioural patterns and trends through interactions with the physiological needs postulated by Maslow (1943) as the most basic human need for food, air, sleep, and water.

In line with this thought process Boyatzis et al. (2000) and Boyatzis (2008) developed a theory of personality, which links and predicts the relationship between individuals' neural and hormonal systems, motives and traits, values and attitudes, explicit observed competencies and competency groups. Expanding on Goleman's theory, the ESC model links emotional and social intelligence as facilitators of the softer competencies. The notion is confirmed by a recent study by Masole and Van Dyk (2016), which indicates, through regression analyses, a strong relationship between employability, emotional intelligence, and psychological capital.

Various other competency intelligences have also been raised, namely identity competency that relates to the enhancement of own value, personal growth through self-management and relationship management. Personal competency refers to managing the self through a process of self-awareness and self-evaluation. This competency results in personal well-being, emotional maturity, and social awareness to manage mutually fulfilling, interpersonal relationships (Di Fabio & Kenny, 2011; Pindek & Spector, 2016).

An advantage of the behavioural approach is that its assumptions are not limited to only the elements that influence behaviour but include knowledge and skills. Le Deist and Winterton (2005) criticise the behavioural approach because it does not include the task-related functional skill elements. The disagreement motivated Le Deist and Winterton (2005) to develop the holistic competency approach. In the holistic typology approach to competency, they argue that organisations need two types of competencies, namely conceptual and operational competencies. While conceptual competency considers cognitive intelligence, knowledge, and understanding, operational competency relates to the functional, application, and psychomotor competencies. The typology supports an understanding of how knowledge, skill, and social competences interact. The competencies associated with performance effectiveness are also classified in conceptual (meta-competencies) and operational (social, behaviour, and attitude) competencies. Meta competencies are not perceived as true competencies per se. They are regarded as facilitators of the acquisition of functional (emotional and technical), cognitive and social competencies – including behavioural and attitudinal competencies. Meta-competencies include elements such as self-awareness, hope, motivation, adaptability, resilience, and the important competency driver of continuous learning (King et al., 2016).

Many scholars, for instance, Chen and Wu (2007), advance the positive relationship between organisational learning, competence development and continuous improvement. Realisation and development of competence are deemed fundamental requirements for innovation across the value chain of organisations (Zangiski, De Lima & Da Costa, 2013). Continuous improvement considerations relate to the adjustment of processes and skills to align with best practices, client requirements, and market demands. Continuous improvement has become very important for the productivity and survival of organisations (Attar, Gupta & Desai, 2012).

The learning competency approach postulated by Van der Heijde et al. (2006) holds competency as a function of lifelong learning. The approach involves a process of learning and adaption supported by personal elements like personality, attitudes, and ability. The model suggests the five general competencies of anticipation and optimisation, occupational expertise, personal flexibility, corporate sense and balance as the predecessors of workplace competency. The recent 5CFC multi-level competency model developed by Mulder (2017:101) presents learning as “the core of future-oriented competency” in the new world of work. The model holds that learning competency is described as the outcome of disciplinary, interdisciplinary, career, self-management, personal-professional, and professional social competencies. An advantage is that the approach can be applied across professions and cultures, based on requirements of employers.

The recently developed work-readiness integrated competence model (WRICM) of Prikshat, Kumar, and Nankervis (2019) determines the global employability competencies across seven Asia Pacific countries. With a relatively small sample of 362 HR professionals and managers, they qualitatively measured global graduate work readiness in the specific region. Qualitative and factorisation results indicate that the four

dimensions of intellectual, personality, meta skill, and job-specific resources as well as their ten sub dimensions of cognitive skills, foundational skills, innovation and creativity skills, leadership skills, self-management skills, core business skills, system thinking skills, communication skills, teamwork, political skills, and information technology skills are linked to 53 work-readiness competencies/skills. Interestingly, the model also describes leadership skills as a core competency required for work readiness. This view is contradicted by scholars, for instance, Marquardt (2000), who argue that leadership skills are developed within organisations through action learning. This view also contradicts White's (1959) effectance motivational approach, which refers to competence as an outcome of efficacy within workplace outcomes, and Sultana's (2009) view that competency arises within the particular contexts where required. It is then indicative that organisational leadership skill competency can be developed only once employed through experience.

Although various theoretical perspectives have been raised to describe competency and the development thereof in the employability view, current studies have not sought to connect workplace competency behaviour to employability capital in a comprehensive perspective.

3.4.3 Linking Competency to Employability Capital

In a recent study, Peeters et al. (2019) link the KSA competencies to the human and social capitals of employability capital in an employability capital matrix (ECM). Human capital is argued as personal resources, while social capital derives from relationships (Smith, 2010). Peeters et al. (2019) argue that the competency classes of job-specific and generic competencies (current job- related), career competencies (potential jobs), and learning competencies are elements of human capital. On the other hand, through social capital, individuals need to establish networks that can assist them to be successful in their work to comply with the conditions for social capital. Both human and social capital is linked to the capability to transfer knowledge and skills between the world of education and the workplace. The argued link between the competency classes and employability capital is presented in the postulated framework indicated in Table 3.6. The framework hypothesises that job-related and job-specific competencies require the human capital elements of technical skills, personal resource skills, knowledge, and attitude to form human capital.

Table 3.6: Employability Capital Matrix

Capital	KSA Competency	Description
	Knowledge (I know)	Knowledge required for a job

Human Capital	Skills (I can)	Transfer skills and skills required to manage career
	Attitude (I want)	Attitude required to manage transfer and career
Social Capital	Support network in workplace	Network of contacts that can assist to manage transfer and develop a career

Source: Peeters et al. (2019).

The subsequently derived matrix is insufficient for the purpose of the study because of the critical importance of linking the entire range of employability capitals (human, identity, PsyCap, social, and cultural) comprehensively to competency to satisfy the intended study framework outcome. Accordingly, the scholar attempts to link employability capital and competency through the discussed core behavioural, holistic, and learning competency theories and models by combining them with the principles of the matrix of Peeters et al. (2019). The comparison presented in Table 3.7 (following the study contribution section) indicates that human capital (green) could be linked firmly through the ECM, while social capital (orange) could be linked only to secondary competencies or skills by deduction.

Contribution to study:

Investigation of scholarly works indicates that employability revolves around the three aspects of capability, competencies, and performance.

Capability relates to the individual abilities to do the work. The individual capabilities will persuade employers of an individual's employability potential. Capabilities are described as the creator of wealth for organisations, essence of superior business processes, and the fundamental component of achieving a competitive advantage for the organisation. Capability can be converted into competency through the mediators of emotional and social intelligence.

Competency relates to exceptional workplace performance, value contribution, and competitive advantage. Learning competency is a function of lifelong learning. Meta competencies are regarded as a facilitator of the acquisition of all other competencies, including behavioural and attitudinal competencies. Emotional intelligence competency relates to the understanding and management of emotions and is described as a facilitator of competency behaviours. Social intelligence competence involves the positive relationships with others. Cognitive intelligence competency relates to "the ability to think or analyse information and situations that leads to or causes effective or superior performance" (Boyatzis, 2008). Personal attributes can be regarded as a mediator of competency.

Through theory and research results, employability capital can be linked with workplace competency.

Table 3.7: Linking the Competency Approaches to the Employability Capital Matrix (ECM)

				Approaches			
Skills Elements	Competency outcome	Typical associated skills	ECM	Core	Behaviour	Holistic	Learning
Knowledge	Application of learning Performance	Know content of field of work and experience	Human capital (I know)	x	x	x	x
Functional Skills	Application of knowledge in tasks. Self-efficacy	Use knowledge or technical skills Develop self-efficacy for emotional functional performance	Human capital (I can) Social capital	x	x	x	x
Behavioural Skills	Superior performance , Self-management Relationships	Relationship management, Influencing, integrity achieving, self-management, agility thinking, motivation, flexibility	Social capital	x	x	x	x
Self-concept	Personal drive, **Self-esteem,** Behaviour Performance	View of self, identity, learning agility. innovation	Social capital	x	x	x	x
Traits/ Personalities/ Dispositions/ Intelligences	Drives Behaviour Abilities, **Interaction**	Flexibility, listening, trust building, inspires, mindset	Social capital		x	x	x
Motives	Motivation **Attitude,** Behaviour **Teamwork**	Motivated, encouraging, ethical behaviour	Human capital (I want) Social capital		x	x	x
Attitudes	Behaviour, **Emotions-management,** Performance	Enthusiasm, motivation, teamwork, performance	Human capital (I want) Social capital	x	x	x	x
Values	Attitude Behaviour Cultural intelligence Ethical behaviour	Ethical behaviour, i.e. honesty, integrity, accountability, care, customer satisfaction, cultural sensitivity.	Human capital (I want) Social capital	x	x	x	x
Lifelong Learning	Current learning Future learning	Continuous learning to add value to the self and organisational performance	Human capital (I know)		x		x

Source: Adapted from the works of Le Deist and Winterton (2005), Mulder (2017), Peeters et al. (2019), and Spencer and Spencer (1993).

Considering the critical importance of capability and competency development for employability and organisational performance, the next section will provide an overview of the methods used to engage development of these concepts.

3.5 DEVELOPMENT OF EMPLOYABILITY CAPABILITY FOR TRANSFERRING SKILLS IN THE WORKPLACE

Nhede (2018:213) states, “Training is severely lacking in providing the necessary skills for public sector managers to tackle the threats posed by and to make optimal use of the opportunities that come with 4IR. Not only further training, but different training is needed if the public sector is to be able to adequately respond to the new demands of the digital era.” Traditionally, training has been provided by HEIs with little involvement or accountability from employers. However, both stakeholders have an important role to play in developing employability. It is the responsibility of employers to take accountability proactively for their business growth and survival outcomes by encouraging active participation.

The development of employability can be seen in the two spheres of pre-employment and during employment. Usually, the pre-employment development outcome is referred to as capability (Finch et al., 2016) while development during employment relates to competency development (Jackson, 2016). In terms of employability development, capability can be regarded as a predecessor of competency. The concepts will be discussed separately based on their positional execution of which capability development usually takes place within the HEI environment and competency development within the organisational environment.

3.5.1 Development of Capability

Capability development is argued to take place through pedagogic practices at HEIs, supported by WIL practices (Billet, 2011). One of the most critical methods of capability development takes place through social interaction experience and learning (Chen, 2017). This platform provides the interaction necessary to develop social and cultural skills sought by organisations. Recent scholarly works by Pitan and Atiku (2017) offer four approaches to entrench employability in academic course work. These approaches of personal development applied to learning, work-based learning, and career development learning are considered briefly.

Personal development planning entails the support and inspiration given by the HEI to students to enable them to reflect and appraise their learning experiences for continuous improvement of performance (Pitan & Atiku, 2017).

Applied learning refers to programmes that expose students to real-world undertakings through opportunities to interact in organisations. Whether through career advice, simulation-based learning, or other applications, students get the opportunity to connect the learnt theory and knowledge with the transfer of skills in the workplace. The approach is also suggested as a bridging approach between curriculum design and the selection of teaching strategies for the development and practising of skills that would reflect work practice scenarios (Oliver, 2011).

Work-based learning offers students work experiences in the organisation for short periods up to three months. Whether freelancing, community, or part-time work, the students have the opportunity to apply their academic and technical skills to develop employability. It involves educational undertakings to integrate theoretical learning with the associated application in a workplace, occupation, or career (Dillenbourg & Betrancourt, 2006).

The career development learning approach is held to be an important vehicle in the transfer of WIL in higher education. These activities involve guidance and counselling in identifying career goals and the ways, skills, and competencies required to achieve these goals. Training includes CV preparation, job hunting, and applications as well as how to present and communicate during interviews (Pitan & Atiku, 2017).

An approach advocated by Atkinson (2016) is the practice of simulated learning. This educational practice allows students to gather experiences in the workplace environment realistically. However, the practice does not facilitate the emotional experience and responses linked to workplace interactions.

Recently, a new approach found popularity with students. It entails the embedded WIL in core curricula and workshop sessions. This method is deemed more effective than courses specifically dedicated to skill development (Jackson, 2016). The method involves the participation of market leaders or practitioners in transferring learning to combine theory with practice through presentations and motivational interactions. These practical interactions are regarded as useful tools to give direction to which capabilities and behaviours are required by employers to render graduates employable. Extra-curricular visits to industries further entrench the transfer of learning (Lowden, Hall, Elliot & Lewin, 2011).

One of the most critical learning methods to transfer learning is advocated by Billet (2011) as reflection. Tools HEIs can use in this approach include journals, critical incident analyses, learning, sharing groups, and portfolios. The method raises awareness of individual strengths, weaknesses, and gaps to close with learning. Reflection also allows students to develop competencies successfully across different settings (Smith, Meijer & Kielly-Coleman, 2010).

When considering the development of employability capital specifically, a combination of approaches is advised. The approaches predominantly argue for developing human capital related to the practices of mentoring, work-based learning, project-based learning, internship, and career counselling (Petty et al., 2014; Smith, 2016; Tomlinson, 2012, 2017; Whelan et al., 2018). The complexity of identity capital renders its development challenging. However, many scholars advance that the methods of developing social interactions, achievement experiences, self-reflection practices, encouragement of critical thinking, experientially rich work-integrated learning opportunities, assignments, project-related tasks and mentoring can be used successfully in enhancing the elements of identity capital (Holmes, 2013; Jackson & Wilton, 2016; Lewis, 2016; Pitan, 2016; Van der Heijde, 2014; Whelan et al., 2018). The development approaches for PsyCap include reflective practices, practical interaction experiences, mentoring, and

practising of self-management behaviours (Holmes, 2013; Tomlinson, 2012, 2017; Van der Heijde, 2014; Whelan et al., 2018). Social capital remains a development priority with the approaches of career exposes, internship, group interactions and socialising, networking, behaviour mirroring, mentorship, role play, and HEI curricula argued to be appropriate development methods (Chen, 2017; Smith et al., 2016). Cultural capital has been advanced by development approaches such as social interaction, recruitment training, group interaction, and HEI curricula (Burke, 2015).

Thus, development of capability predominantly takes place outside the workplace environment. On the other hand, effective competency development is argued to take place in the employer workplace environment through work-related experiences (Jackson, 2009; Teijeiro, Rungo & Freire, 2013).

3.5.2 Development of Competency

Both Jackson (2015) and Smith (2012) advance the employer-based, work-integrated learning (WIL) method as the most appropriate strategy to develop competency. WIL is described as a strategy for demonstrating and reassuring competencies of employment-related outcomes (Papadopoulos & Armatas, 2013; Oliver, 2011). In addition, the workplace environment is regarded as an ideal platform to provide experience to its diverse cultures and what graduates would need to bring to the workplace.

Atkinson (2016) designates WIL as a learning transfer method used by means of various programs and activities to integrate knowledge and skills with workplace practices in an actual work environment with the intent to gain experience and develop employability. A fundamental requirement is that the WIL curriculum should improve the experience and optimise learning through multiple approaches. It should also offer learning practices that develop abstract and analytical abilities, which, in turn, facilitate the presentation of discipline-specific knowledge in diverse and multifaceted workplace scenarios (Jackson, 2017).

WIL can take on many forms and is used as an umbrella term for the various, practical development approaches. WIL options include fieldwork, projects, apprenticeships, mentoring, co-operative education, internships, work placements, job shadowing, cooperative education, joint industry courses, dual vocational training, co-operative education, community service activities, reflective assessment, and sandwich year degrees (Chan, 2013; Finch et al., 2016; Garkovich, Bunch & Davis, 2016; Rosin, 2015).

The advantages of WIL are argued in terms of the employer opportunity to ‘hand-skill’ prospective employees to subsidise their skill pool, maintain their resource pool, and improve the effectiveness of recruitment processes. An added benefit is that WIL provides organisations with employable graduates and reduce the training period as well as development costs of newly recruited employees The employer also have an opportunity to evaluate students' performance and attitudes and identify potential high-flyers that will offer value. While not an intended outcome, social contribution through the internship vehicle develops the corporate image and reputation (Jackson, 2017; Metzger, 2004; Smith 2012).

Billet (2011) highlights some of the challenges of the workplace WIL programmes: They are expensive, often under-resourced, and inadequate in strategies, induction and preparation. Expectations from graduates are also not communicated, which affects programme quality and outcome. Khuong (2016) supports Billet's concerns and holds the view that organisations prioritise operational competency above those of academic skills, which can create confusion for graduates. Contradictory, some scholars believe there are still too much focus on curriculum and knowledge and too little focus on applied learning and the development of functional skills within HEIs (e.g. Tomlinson, 2012). The critical reason highlighted for the failure of WIL is the misalignment of skill expectations between employers and participating students (Jackson, 2017). A further challenge is that employers often complain that it requires an excessive time investment to prepare graduates for operational competency. In spite of the many challenges posted, WIL has established itself firmly as a key enabler of employability based on the range of benefits and advantages offered to graduates and employers. There is significant evidence of the development effect of WIL programmes and internship exposure on graduate learning. Longitudinal inquiries also show a sustained and positive employability effect (Jackson, 2017; Whiston & Oliver, 2005). Therefore, it is important for stakeholders to establish a common goal, do proper course planning with appropriate and quality programme content, and offer appropriate induction to highlight workplace expectations (Smith & Worsfold, 2014).

To reiterate, one WIL practice or approach cannot be considered superior to the other. However, the focus of this study is on the WIL method of internship as presented in the study objective. Accordingly, a brief introduction will be presented next to conceptualise the environmental background of the study objective.

Internship programmes are offered by employers after graduation. The programmes present a medium for applying knowledge to develop competencies actively through practice over a period of not less than six months. Graduates assigned to these programme experiences report profound learning through the opportunity to engage in tasks that have real-world results in a diverse cultural workplace. The application of knowledge to real-world challenges allows graduates to expand their knowledge, experience and skills. One recent study by Kapareliotis, Voutsina, and Patsiotis (2019) shows that students who attended an internship program reported higher employability characteristics in that they: valued intrinsic rewards above extrinsic ones, knew what was expected from them, and could apply the meta- and professional skills required by their employers. These findings support the view held by many scholars that internship is an appropriate bridge between the worlds of academics and the modern workplace (Hodges, Eames & Coll, 2014).

The specific nature of internships uniquely supports the development of dispositions and specifically soft skills. Accordingly, it is regarded as a popular channel to establish organisationally directed social capital, employment opportunities, job-specific experience, and network opportunities (Jackson, 2013). It also expands experience in the human interaction aspects, which cultivates emotional work readiness and is

argued as the ideal platform to introduce graduates to the specific soft skills required in the workplace (Garkovich et al., 2016; Shivoro, Shalyefu & Kadhila, 2018; Smith, Ferns & Russell, 2016; Thonglek, 2015; Vaughan, 2017).

The notion implies that elements of emotional work readiness should be understood to ensure proper development of these important criteria. Bandaranaike and Wilson (2015) postulate the criteria supporting emotional work readiness as self-awareness, self-management, awareness of others, and management of relationships. A good dose of curiosity plays a significant role in workplace learning and job performance (Reio & Wiswell, 2000).

To summarise, competency is the outcome of a development process commencing with the development of employability capital as illustrated in the taxonomy in Figure 3.7:

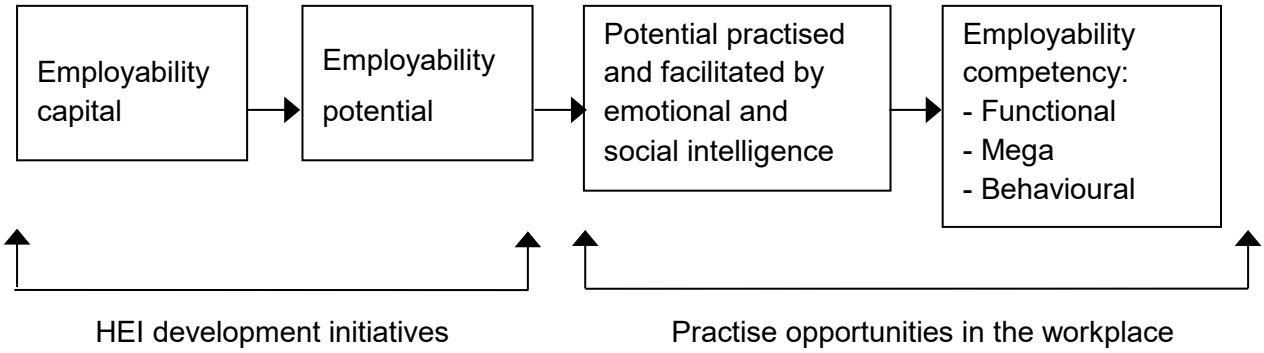


Figure 3.7: Guiding principles of capacity and competency development
Source: Researcher's understanding of the assessed literature.

One of the critical elements in development initiatives is to determine the effectiveness of the intervention. Determining the gaps in competencies and developing a development initiative to address the gap is a relatively easy process done by means of an appraisal process against an agreed individual development plan. However, monitoring the development progress of soft skill capability is not that simple (Matteson et al., 2016). Regardless, measuring progress is an essential activity for the intern to reach full potential and competency.

A measurement method advanced by Matteson et al. (2016) is the triangulation of self-reported data with the opinions of peers or supervisors. Another method is the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) developed by scholars. In addition, Chiu, Mahat, Rashid, Razak and Omar (2016) postulate that observations of attitude and human interaction are valuable measures to determine growth in soft skills.

Whatever the method preferred by employers, training interventions without some sort of progress, monitoring and measurement is doomed to fail (Matteson et al., 2016).

Contribution to the study:

WIL is considered an appropriate vehicle to develop the skill competencies of graduates. It offers employers the opportunity to align the skill propositions of graduates with the skill requirements of the employer. Empirical studies have shown that WIL supports the transfer of learning of soft skill capabilities. Measurement of intervention progress remains a critical aspect of the development process.

3.6 CONCLUSION

This chapter addressed the concept of employability capital in the organisational success context in terms of capability and competencies. The chapter made use of literature to answer the research questions:

Which driving concepts and theories define employability?

How can employability be developed?

As a point of departure, employability was discussed in terms of capability, competency, and employability capital. The role of individual capability and competency was discussed in relation to organisational success. Capability was found to be the link between resources and processes and the core element of the competitive advantage of an organisation. On the other hand, it was argued that competence is a driver of organisational survival and a performance differentiation factor. A brief overview of the methods that can be used to develop capabilities and competencies was presented. Internship was introduced as the environment in which the study objective would be executed.

Employability capital was described as the amalgamation of the contextual human capital (knowledge, skills, and attitude), identity capital (interpersonal building blocks of soft skills), psychological capital (mega-skills that drive personal and organisational growth and support soft skill competency), social and cultural capital (human interaction). Guided by scholarly works, the behavioural elements of each capital were determined and linked to the appropriate capabilities.

A growing body of literature indicates that soft skills of graduates/employees will direct the degree and direction of job and organisation performance in the 4IR. Accordingly, the development of soft skills will become increasingly important for performance of graduates, employees, and organisations (Cimatti, 2016; Schwab, 2016; UKCES, 2014).In Chapter 4, the focus shifts to the conceptualisation of soft skills and a theoretical framework to support the study objective. Chapter 4 concludes the literature study.

CHAPTER 4

SOFT SKILLS AS ORGANISATIONAL SUCCESS DENOMINATOR

We carry an exciting energy, enthusiasm, and creativity as youth in what we do, thus it is a waste of human capital when these gifts are not tapped in improving businesses, letting potentials lie idle, and putting the current and future world of work in jeopardy.

(Mbah cited in Deloitte Global & the Global Business Coalition for Education, 2018:10).

4.1 INTRODUCTION

Chapter 3 discussed the role of capability and competence in the employability concept. An understanding was sought in terms of what employability means for organisational success in relation to capability and competency. A brief overview was provided in terms of how employability capability and competency can be developed. Employability capital was highlighted as the capability and competency driver of organisational performance, success, and competitive edge. The elements of employability capital were contextualised, and development approaches were considered. Examination of the concepts highlights soft skills as the golden key to organisation performance, differentiation, and success during the 4IR. Accordingly, this chapter commences with an introduction of the predicted employer skills required for the 4IR.

The remainder of the chapter will turn to the second and third sub arguments raised in the study argument, namely that employability capital facilitated by emotional and social intelligence practices within work-integrated learning opportunities will render the soft skill competence required by organisations to support organisational growth.

Following the introduction of the 4IR skill requirement, soft skills, as the significant driver of employer 4IR skill requirements is contextualised and its role in organisations' performance is discussed. In the next phase, employability capital is linked to soft skills by making use of emotional and social intelligence models. Literature shortcomings have been identified and are presented and discussed. The final phase entails the development of a theoretical soft skill competency framework to guide the empirical investigation. The discussion points of Chapter 4 are presented in Figure 4.1.

Chapter 4 Soft skills as organisational success denominator	Key skills needed during the Fourth Industrial Revolution
	Conceptualising soft skills
	Linking the elements of employability capital to soft skills competency
	Theoretical shortcoming identified in literature
	Theoretical soft skill competency framework

Figure 4.1: Literature study layout for Chapter 4

Source: Compiled by the researcher.

The chapter provides an explanation of the research question:

> Which driving concepts, theories, and drivers define soft skills?

The strong call for appropriate skills escalated as organisations stepped into the dawn of the 4IR. Employers demand new skill sets for optimal productivity, networking, increased innovation, social and cultural diversification, cross-functional teamwork, adaptability, and resilience (Matsouka & Mihail, 2016; McKinsey Centre for Government, 2012). Nowadays, the employers require that graduates, at minimum, should be equipped with two classes of skills:

a) The harder technical and discipline-specific competencies derived from formal qualifications and knowledge derived from organisation information, market information and education knowledge (Kay & Greenhill, 2011); and

b) A variety of behavioural, or 'softer', skills (Lowden et al., 2011).

Hard skills are associated commonly with education knowledge that come down to specific job- related expertise and the ability to put theory into practice in a workplace environment (Sadler-Smith, 2010). A study by Nillson (2010:540) found that hard skills "are considered to be of declining importance. Generally, these skills are considered less important in relation to one's individual employability compared to different forms of soft skills and personal attributes."

The hard skill of common sense, often described as practical intelligence, is increasing in importance. It is postulated as the facilitator of skill application in real-world settings (Sternberg, 2018). Hoeschl, Bueno, and Hoeschl (2017) argue that, in the 4IR, common-sense knowledge presents a critical judgement constraint in the development of artificial intelligence. In itself, this constraint presents that common sense should be considered as a very important to even critical ability in terms of getting employment and retaining employment.

Soft skills are the softer human- related skills that have a more constructive benefit than hard skills have in addressing quality management, continuous improvement, teamwork, and the consolidation of the market position of an organisation (Fotopoulos & Psomas, 2009). While the importance of technical skills should not be negated, scholars agree that soft skills will be crucial to organisation performance during the 4IR (Deloitte Global & the Global Business Coalition for Education, 2018; Petrillo et al., 2018). In fact, Schwab (2016) argues that organisations will be able to address the 4IR disruptions and challenges only if they unlock the shared value of people's minds, hearts, and souls. Abilities in the softer human skills are fundamental for employability success in the global labour market specifically based on its contribution, product and service innovation, productivity, competitiveness, and organisational growth (Cimatti, 2016; Robles, 2012; UKCES, 2014).

It then follows that to be employable during the 4IR, the skill propositions of graduates should be aligned with skill requirements of organisations. This notion implies consideration of the skills employers predict to be in their 4IR skill basket requirements.

4.2 KEY SKILLS REQUIRED DURING THE 4IR ERA

Nhede (2018) mentions that the skill competencies required during the previous industrial revolutions differed. Similarly, the 4IR will be no exception and will demand its specific and unique skills.

As discussed in Chapter 2, the megatrends direct that the primary skill requirements of employers would relate to customer satisfaction, innovation, quality performance, environmental care, collaboration, teamwork, and leadership (Frost and Sullivan Consultancy, 2015; Vielmetter & Sell, 2014). To determine the skill requirements of employers during the 4IR, the World Economic Forum (2017) and McKinsey Global Institute (2018) embarked on empirical studies to determine the predicted skills. Their list of the top 10 skills indicates that the Industry 4.0 period requires the soft skills of complex problem-solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgement and decision-making, service orientation, negotiation, and cognitive flexibility. During the Industry 5.0 period, the hard skill of technology is considered the most important skill (indicated in blue in Table 4.1). The remaining nine skills relate to the soft emotional and social skills, namely communication, negotiation, interpersonal empathy, leadership and management, creativity, initiative, adaptability, and continuous learning. Integrating the skill views of executives as determined by Robles (2012), Table 4.1 shows that the executive futuristic focus has not yet shifted to consider the skill requirements for the 4IR. Similarly, the 4IR view of skills does not include the clear critical requirements of integrity and work ethics, which clearly are regarded as critical by the executives.

Table 4.1: Top Skills Required during the Fourth Industrial Revolution Period

	Robles	World Economic Forum and McKinsey Global Institute	
	Executives view 2012	Industry 4.0 2016 -2024	Industry 5.0 2025 – Fifth Industrial Revolution
1	Integrity	Complex problem-solving	Technology skills
2	Communication	Critical thinking	Emotional and social skills
3	Courtesy	Creativity (innovation)	Communication
4	Responsibility	People management	Negotiation
5	Interpersonal skills	Coordinating with others	Interpersonal empathy
6	Professionalism	Emotional intelligence	Leadership and management
7	Positive attitude	Judgement and decision-making	Creativity (innovation)
8	Teamwork skills	Service-orientation	Initiative
9	Flexibility	Negotiation	Adaptability
10	Work ethics	Cognitive flexibility	Continuous learning

Source: Robles, (2012), World Economic Forum (2017), and McKinsey Global Institute (2018:7).

The executive view clearly indicates the complexities that are found in the organisation. Schwab (2016) warns that leadership roles will become more complex as leaders increasingly need to manage complexity in rapid changing external and internal organisational, intercultural environments. With the speed of change escalating, leaders will have to focus on promoting team cohesiveness and facilitate engagement in this era of increased individualism and innovation demands. Effective collaboration, analytical process to support decision-making processes, and appropriate knowledge- sharing skills are required to defragment the organisational functions and encourage a seamless value chain. Consequently, commitment to team participation and management will become a priority. Managing the diversity posted in terms of culture and individualism will require core leadership competencies. In addition, the scarcity of skills and experience will require from organisations to establish a deep sense of loyalty in existing employees to retain highly demanded skills (Frost and Sullivan Consultancy, 2015; Vielmetter & Sell, 2014).

Kelly (2019) warns that leaders should set their organisations up for speed, eliminate conditioning structures and red tape, create collaborative networks, merge divisions to function as one functional output, and manage resources optimally. Hence, with increase pressure on leaders to produce for survival and relevancy through product and reputation, the standard practice of managerial control and direction will need to be replaced by employee self-direction, accountability, teamwork, and the ability to form positive relations to enhance customer satisfaction, collaboration, and cooperation. This notion by

Schwab (2016) implies the need for the softer human skills of self-management and motivation, emotional intelligence, social intelligence, teamwork, and flexibility, which increasingly will become more important in the workplace. Similarly, the need for softer skills will increase exponentially to satisfy demands of individual consumers. To support the organisation in staying relevant and find a competitive advantage, employees will have to broaden their thinking and be willing to adapt and invest in continuous learning (McKinsey Global Institute, 2018). Individualism will render diverse views in which event ethical boundaries often become blurred. To uphold societal demands for good governance and ethical behaviour, employees need to subscribe to the highest standard of personal values and ethics (Frost and Sullivan Consultancy, 2015; Vielmetter & Sell, 2014). Additional key skills highlighted are planning and control (Stearns, 2018); identification, preparation, processing, interpretation of information, and decision-making (Prinz et al. 2016); and professional, methodical, analytical, and personal competencies (Neumann, 2017).

Schwab (2016) classifies challenges and opportunities concerning leadership skills for the 4IR in terms of intelligences. Oosthuizen (2017) expanded his view into a framework of ten types of intelligence, termed the Fourth Industrial Revolution Intelligence Framework. The model proposes that the intelligences of contextual intelligence, emotional intelligence, inspired intelligence, physical intelligence, entrepreneurial intelligence, strategic intelligence, transdisciplinary intelligence, ecosystem intelligence, Socratic intelligence, and ethical intelligence inform the leader of the future. On this note, it is evident that soft skills will dominate the employer skill requirements during the 4IR. Accordingly, the enhancement of soft skill competencies is likely to influence organisational performance positively. The wealth of soft skills required necessitates that one should conceptualise soft skills and consider how they relate to the employability capital required by graduates to be deemed employable.

4.3 CONCEPTUALISING SOFT SKILLS

The Economics Nobel prize winner, James Heckman, is widely recognised as the ‘father’ of soft skills. In one of co-authored papers, it is written that “the larger message … is that soft skills predict success in life that they causally produce that success, and that programs that enhance soft skills have an important place in an effective portfolio of public policies” (Heckman & Kautz, 2012:1).

Working alongside AI and robots in the 4IR, the softer human skills will distinguish the uniqueness of humans in the new world of work and realise in visible organisation value (Deloitte Global & the Global Business Coalition for Education, 2018). It is argued that soft skills designate all the competencies that cannot be linked directly to a definite task and play a major role in normalising the relationship between individuals and within teams (Cimatti, 2016).

Many different terminologies have been allocated to soft skills, for instance, non-cognitive, key competencies, generic competencies, and life skills (Kautz, Heckman, Diris, Ter Weel & Borghans, 2014;

OECD, 2015). The different terminology has given rise to numerous contextual descriptions of soft skills. It is often described in terms of behaviours and characteristics (Holmes, 2001), human skills (Katz, 2009), habits, values, attitudes, (Coetzee, 2012), interpersonal and social competencies (Hurrell, 2016), socio-emotional skills (Ibarraran, Ripani, Taboada, Villa & Garcia, 2014), and non-cognitive skills (Deming, 2017). Recent suggestions are that the core components of soft skills encompass individuals' psychological constructs, which, when activated, ultimately reflect as soft skill behaviour (Hurrell, 2016; Van Harten et al., 2017). However, Matteson et al. (2016) warn that while interdependence exists between soft skill behaviour and character dispositions/traits, a clear distinction is made in scholarly works of what a soft skill is and what a disposition is. The two concepts differ in the sense that soft skills refer to the abilities that result in behaviour, for example the ability to be honest. On the other hand, a disposition refers to being honest as a value-driven concept. The similarities of soft skills and dispositions are that both are socio-cultural occurrences, thus, they are not fixed elements but develop and grow through experience and reflection.

To define soft skills, Perrault (2004) states that soft skills are the personal abilities, traits, or the level of commitment individuals' display that sets them apart from others who have the same level of education and experience. In addition, soft skills are regarded as the outcome, or the 'coming together', of the various human psychological constructs of attributes, attitudes, behaviours, non-cognitive intelligences. and meta-competencies (Potgieter, 2012). These descriptions seem to indicate a form of similarity between soft skills and employability capital. However, Perrault (2012) warns against this misconception and raises soft skills to a higher level than that of employability capital. Brungardt (2009) supports Perrault and links soft skills to the competency that derives from the personal and interpersonal capabilities. Hence, employability capital relates to capability, while soft skill competencies can be linked to workplace-specific competencies.

As with any skills, soft skills involve action, and when executed, they realise in behaviour that generates value for the organisation, for instance, in terms of service orientation, risk-taking and people management (Matteson et al. 2016). Various advantages of soft skills, as a support function for hard skills, have been posed for the organisation. One of the critical important objectives of organisations in the 4IR is the need to remain competitive. A method advanced by Cimatti (2016) to obtain competitive advantage, is through creativity and the continuous development of soft skills in the organisation, as it assures clients of quality service. Innovation and continuous improvement of processes, systems, and resources are required by organisations to develop their footprint. Furthermore, career self-management skills involve the lifelong learning and skills organisations required to support competitive advantage and continuous improvement practices. The soft skills of adaptability and innovation are regarded as key enablers to effect a quick turn-around on market demands (Finch, Hamilton, Baldwin & Zehner, 2013). Similarly, the ability to engage with clients and stakeholders positively and effectively and establish

networks can attribute to organisational prosperity. In addition, the ability to self-manage plays a significant role in managing cultural diversity and optimising customer relations (Cimatti, 2016).

With the increased benefit expansion of technology and digitisation, soft skills in terms of business acumen and continuous self-development offer the organisation timely and relevant market responses (Stevens & Norman, 2016). A disadvantage of the increased availability of technology is the immense amounts of data available to sort through for relevant information to enable optimal decision making. Such scenario emphasises the need for the softer skills of critical thinking and advanced problem solving (Ritter, Small, Mortimer & Doll, 2018). Acknowledging employees as a source of competitive advantage is argued to result in substantial advantages in productivity, profit, quality products and services (Halfhill & Nielsen, 2007)

Lippman et al. (2015) suggest five empirically supported and principle skills that increase the chances of workplace success, namely social skills, communication skills, higher-order thinking, self-control, and self-concept. Social skills are globally important as a cluster of skills that allows an individual to have positive relations with others, show respect, behave appropriately, and being able to manage conflict . For the employer, these skills are important, as they promote team cohesion, performance, excellent customer service, and innovation. Communication skills include considered and proper phrasing, transfer, consideration, and interpretation of information and ideas. The advantages of communication in the workplace are that it supports an individual's interaction with others and assists in optimal system and process flow as well as risk management. Higher-order thinking can be separated into the abilities to solve problems, critical thinking, and sound decision-making. All three constructs entail the due diligence concepts of identifying, information gathering, evaluation, and conclusion. These skills are critical for organisations, as they provide the organisation confidence in decisions and strategic direction. It further supports the organisation in managing risks proactively, access market trends and competitive advantage opportunities, evaluate operations for continuous improvement, and innovative growth. Self-control refers to individuals' capability to control impulses, focus on matters on hand, irrespective of diversions, delay their gratification when required, and regulate their emotions and behaviour. In the workplace, these abilities can be linked to all human interactions and are deemed the basis of social and communication skills. Abilities linked to self-control are intrinsic motivation, dependability, goal orientation, dedication, hardworking, positive team relations, problem-solving, sound decision-making, critical thinking, and leadership. Self-concept relates to individuals' sense of themselves and includes capabilities such as self-esteem, self-efficacy, self-confidence, self-awareness, a sense of being, values, and beliefs. These skills are critical for a positive view of the self and utilisation of strengths to the benefit of the organisation. Each of these five skills can be attributed to observable workplace behaviour.

Moreover, flexibility is regarded as a critical ability of a graduate or employee to adapt quickly to the changes demanded by the volatile organisational environment. Flexibility is considered an important skill

in team dynamics, as it supports enhanced job performance and a conducive working environment for optimal productivity (Finch, Hamilton, Riley & Zehner, 2013).

Robles (2012) describes the most significant soft skills postulated by employers to enhance organisational success as professionalism, teamwork, social skills, flexibility, integrity, courtesy, responsibility, positive attitude and work ethics. A study conducted by Matsouka et al. (2016) supports Robles's finding and find employers' requirement of the soft skills of emotional intelligence and lifelong learning as important. Guglielmi (2015) adds the skills of self-efficacy, optimism (positive contribution), determination to reach goals (hope), and resilience to the pool of soft skills.

In a recent theoretical study, Mahasneh and Thabet (2016) used the literature-based discovery method to develop a normative taxonomy of 120 soft skills for the construction industry from 32 scholarly works. This list is not exhaustive as, even today, new soft skills are stepping to the fore in the stated organisational requirements. Table 4.2 presents a comprehensive list of current soft skills and behavioural descriptions. The soft skills identified in the World Economic Forum (2017) and McKinsey Global Institute (2018) reports as the critical 4IR requirements, are highlighted in blue in the table.

Table 4.2: Soft Skill Competencies descriptions

Soft Skill Competencies	Behavioural Description
Accepting criticism	Willing to reflect on criticism to correct and grow
Accountability	Accept responsibility for outcome and performance
Achievement driven	Determined to improve or meet a set standard of excellence
Active listening	Concentrating with full attention on what is being said
Adaptability	Flexible in managing change and crises
Adversity	Willing to face difficult situations
Agreeableness	Kind, cooperative, warm, friendly, and considerate
Assertiveness	Confident and certain behaviour
Attention to Detail	Perform with thoroughness and accuracy.
Autonomy	Independent and free from external control or influence.
Building bonds	Nurturing relationships in the workplace
Business acumen	Keen and quick in recognising and dealing with business circumstances
Buy- in and advocacy	Fully support quest
Career management	Take self-responsibility for career
Change catalyst	Initiating or managing change in appropriate situations.
Coaching	Support and teach others

Soft Skill Competencies	Behavioural Description
Collaboration and cooperative	Working together in a positive manner towards goals.
Commitment	Align with the goals of self, the group and organisation.
Communication	Convey a clear and convincing message professionally on an audience-appropriate level .
Conceptual thinking	Understand a situation or problem by recognising patterns and attending to primary aspects
Conflict management	First seek to understand, and then use positive influence to negotiate and resolve disagreements.
Conscientiousness	Meticulous in work and take responsibility for own and organisation performance. Think before acting.
Continuous learning	Continually reflect and develop to grow and improve knowledge and skills to perform effectively and adapt to changes.
Contribution to group effectiveness	Optimal participation, relation management, appropriate drive to direct goal performance
Coping with complexity	Able to deal with problems and uncertainties.
Courteous	Respectful and act with good manners.
Creative	Continuously seek new ways to improve product, service, or systems.
Cultural awareness	Aware that people differ and comfortable with those differences.
Critical thinking	Pattern recognition and conceptualisation. Due diligence consideration.
Customer service	Serving customers in such a way that they will remain loyal.
Deal with pressure	Keep calm even under difficult circumstances
Decision-making	Gather all information. Consider all options. Consider risks.
Decisiveness	Make decisions quickly and efficiently
Delegation	Willing to share responsibility to empower others.
Determination	Pursue goals despite constraints.
Developing others	Sense what others need in order to develop and encourage them.
Diplomacy	Deal with people in a sensitively and tactfully
Diversity awareness	Aware of others' views and cultures to understand and participate positively.
Diversity management	Optimally use opportunities to bridge cultural gaps between/with diverse people.
Drive	Desire to reach a goal
Emotional awareness	Knowing one's emotions and their effects.
Emotional intelligence	Aware of own emotions and the emotions of others.

Soft Skill Competencies	Behavioural Description
Empathy	Sensing and considering others' feelings and viewpoints with the intent to understand their concerns.
Enthusiasm	Intense and keen interest
Ethical judgement	The decision between right or wrong and ethical or unethical
Ethically responsible	Recognise, interpret, and act upon several principles and values within a specific context.
Facilitation	A process through which different groups are led to derive a common understanding or goal.
Flexibility	Having the willingness to change or compromise.
Focus	Pay specific and full attention to a certain object, process, action, or goal.
Follow-up	Making sure that a certain requirement/action is on track.
Giving and receiving feedback	Positive manner to provide feedback and invite feedback for continuous improvement purposes.
Global mindset	Consider every action and decision holistically.
Goal setting and management	Develop and manage an action plan intended to motivate and guide a person/ group toward a specific target.
Honesty	Act honestly in all activities and with people.
Influence	Use effective tactics for positive persuasion.
Initiative	Readiness to act on opportunities out of own free will .
Innovation	Comfortable with and open to new ideas and information.
Insight	Gain a precise and deep understanding of somebody or a topic.
Inspiring others	Motivate others to a strong feeling of enthusiasm for a certain goal or concept.
Integration	The process of consolidating facts, groups, or ideas.
Integrity	The state and quality of being honest and having strong moral principles and values.
Intercultural sensitivity	Awareness and an understanding of the cultural differences and similarities between groups
Interpersonal intelligence	The ability to understand and interact effectively and positively with others.
Intrapersonal intelligence	The ability to direct own emotions, feelings, perceptions, attitude and behaviour positively .
Judgement	Ability to make well-considered decisions or derive practical conclusions
Lead and inspire	Inspire and guide groups and individuals to become more or reach higher goals.
Lifelong learning	Use every opportunity to reflect and learn on an ongoing, self-motivated quest for knowledge for personal or professional growth and development.

Soft Skill Competencies	Behavioural Description
Listening	Make an effort to take notice of and act on what someone says
Loyalty	Being supportive and committed.
Maturity	Acting in a manner that is considerate, conscientious, and building.
Mediation	Intervene to resolve a dispute or facilitate a win-win situation.
Motivate others	Inspire others to act in a certain manner or to reach a certain goal.
Negotiation	A discussion process through which a win-win situation is pursued with the aim at reaching an agreement.
Optimism	Setting a positive tone in an environment or situation.
Organisational awareness	To understand the structure, culture and operations of an organisation and how internal and external matters can affect the organisation.
Organising	Systematic allocation of resources and grouping
Outcome orientated	Focussed on reaching a certain predetermined goal.
People management	Manage people effectively to reach strategic, financial and policy goals.
Personal ethics	The beliefs of an individual about morality, values, right and wrong.
Personal presentation	The manner in which others perceive a person
Persuasion	The process to influence someone to do or believe something.
Planning and coordination	Making plans and organise the resources and activities in such a manner to reach goals effectively.
Political awareness	Appraise a group's emotional undercurrents and power relationships.
Positive attitude	A positive way of thinking or feeling about something/some-one
Positive self-esteem	Confident in one's own worth and abilities
Positive body language	Positive conscious and unconscious movements through which attitudes and feelings are communicated.
Practice good governance	Follow and ensure that legislation, rules, standards, policies, and procedures are followed.
Presentation skills	Appropriate and confident in communicating information to an audience.
Preventative	Ensure that a certain potential negative occurrence does not happen.
Proactive	Acting in advance of a future situation. Take control and manage a situation rather than waiting for something to happen.
Problem solving	Analytical reasoning. Consider all options.
Professionalism	The expected conduct and qualities that characterise a person in a specific occupation.
Reasoning	Consider something logically and sensibly.
Reflection	Know one's strengths and limits and consider actions for continuous improvement.

Soft Skill Competencies	Behavioural Description
Relationship management	Optimally maintain positive relationships with others.
Reliable	Being trustworthy and dependable.
Resilience	Able to recover quickly from difficulties.
Respect for the environment	Proactively consider the environment in all operational activities
Responsible	Perform an action effectively for the best possible outcome.
Risk Management	Identify, evaluate, and prioritise risks followed by coordinated actions to minimise, monitor, and control the probability of occurrence or effect, should such risk occur.
Risk taking	Willingness to take risky action in the hope of an anticipated result
Self-awareness	Through introspection, be aware of feelings, emotions, strong points and weak points and how they can influence situations and behaviour.
Self-confidence	Know and act according to one's self-worth and capabilities.
Self-control	Recognise and control upsetting emotions and impulses.
Self-direction	Make own decisions and organise work without input from others.
Self-efficacy	The belief in the self to perform and achieve tasks or goals.
Self-motivation	Ability to focus on what should done even when faced with challenges and without influence from other people or situations
Self-reflection	Seriously consider one's character, actions, and behaviour
Self-regulation	The ability to manage one's emotions and behaviour, irrespective of circumstances or provocations.
Sense of community	Consider the concerns of the community.
Sense of humour	Ability to laugh at self and appreciate humour
Service orientation	Anticipate, identify, and meet customers' needs
Sharing visions	Articulate a vision in such a manner that it energises and brings focus to others.
Social awareness	Being aware of the challenges and hardships different societies face daily
Social intelligence	Combined measure of self- and social-awareness, ability to act appropriately in social settings and to manage complex social change.
Social responsibility	An obligation to act for the benefit of the broader society. A duty to maintain a balance between the economy and the ecosystems.
Social skills	Competent in facilitating interaction and communication with others in a space where social rules and relations are created.
Stress management	Use appropriate techniques to control stress levels
Stress tolerance	Relaxed and calm when faced with difficulties

Soft Skill Competencies	Behavioural Description
Systems thinking	Holistically consider the sub components of a system, their interrelatedness, and dependency.
Teamwork	Create group synergy in pursuing cohesiveness and reach collective goals.
Trust others	Believe, have confidence or faith in others
Trustworthy	Act according to expected standards of honesty and with integrity.
Visionary	Using imagination or wisdom to postulate a future position or goal
Willingness to learn	Prepared to learn from mistakes and from others.
Work ethics	Set of values positioned around importance of work and demonstrated by determination to work hard, be professional
Work under pressure	Deal with constraints that are often not controllable.
Work-life balance	Balance time between work, family, or relaxation activities.

Sources: Adapted from Mahasneh and Thabet (2016), OECD. (2015), McKinsey Global Institute (2018), and the World Economic Forum (2017)

In considering the development of soft skills, Kautz et al. (2014:2) agree, “skills are not traits set in stone at birth and determined solely by genes. They can be fostered.”

Evidently, the development of soft skills will not be an easy task. Therefore, early interventions of developing soft skills, for instance, through parental or school contributions, can result in higher payoffs. However, soft skills can be developed over an individual’s entire life cycle, and competency can increase with maturity (Roberts & Mroczek, 2008).

Development of soft skills is the outcome of both the desire of the individual and a supportive environment (Lewin, 1951). The view supports the argument that training programmes only initiate knowledge and a thought process. Authentic learning of soft skills comes from continuous practising, self-reflective practices, and assessing feedback and inputs from others positively through a change management process (Levasseur, 2013).

Kautz et al. (2014) argue that workplace-based social and emotional learning programmes are the most effective initiation training interventions of soft skills for graduates. The argument rests in the association formed by the graduates between the learning outcomes and the work-relevant skills and discipline required. Thus, soft skills can be linked to employability capital through emotional and social intelligence models. The next section highlights this link through theory.

4.4 LINKING THE ELEMENTS OF EMPLOYABILITY CAPITAL TO SOFT SKILL COMPETENCY

Research, for example by Mayer et al. (2016) as well as Meshkat and Nejati (2017), has established a positive relation and correlation between the constructs of employability capital and soft skill competencies.

Similarly, in prominent models, theoretical validation is found between the constructs. The (i) theory of emotional intelligence (EI) postulated by Mayer, Salovey, and Caruso (2004), (ii) Goleman-Boyatzis's (2008) competency model of emotional intelligence, (iii) Bar-On's (2006) model of emotional-social intelligence, (iv) the emotional and social intelligence model of Barnett (2004) and (v) Han and Kemple's (2006) concept of social competence are introduced briefly to contextualise the link.

Mayer and Salovey (1997) suggests in their theory of emotional intelligence and ability model that soft skills centre on four EI ability requirements, namely (i) to perceive emotion in oneself and others; (ii) assimilation of emotion to facilitate the thought processes; (iii) ability in understanding emotion; and (iv) the ability to manage and regulate emotion in self and others and respond appropriate and consistently. These align from initial emotion perception to the final activity of emotional management. The model recognises the interrelatedness of emotional and social intelligence. Mayer et al. (2016) expanded the model to include problem-solving as an ability requirement. The ability model links soft skills to the employability capital elements of social (emotional intelligence) and human capital (problem-solving).

Goleman's (1998) competency model of emotional intelligence (EI) describes EI in the five capabilities within identity, PsyCap, and social capital, namely (i) self-awareness (confidence, recognise own feelings); (ii) self-regulation (self-control, trustworthiness, adaptability); (iii) motivation (commitment, initiative, drive, optimism); (iv) empathy (recognising and understanding others' feelings, diversity management, political awareness); and (v) social skills (conflict management, communication, leadership). Goleman reasons that these clusters of five capabilities form the basis of 24 soft skill competency behaviours, namely emotional self-awareness, accurate self-assessment, self-confidence, emotional self-control, trustworthiness, conscientiousness, adaptability, innovativeness, achievement drive, commitment, initiative, empathy, service orientation, developing others, leveraging diversity, political awareness, influence, communication, leadership, change catalyst, conflict management, building bonds, collaboration and cooperation and team capabilities. Goleman's soft skill competency behaviours are linked to the identity and PsyCap capital employability related elements proposed by Serrat (2017) and presented in Table 4.3. The elements relate to the personal elements of self-awareness, self-regulation and self-motivation.

Table 4.3: Linking Employability Capital Elements to Personal Competency Behaviours

Self-Awareness		
Emotional Awareness	Accuracy of Self-assessment	Self-confidence
Recognise the feeling they are experiencing and the reason. Know the link between what they feel, think, do, and say. Recognise how their feeling will influence their performance. Are guided by values and goals.	Aware of strengths and weaknesses. Reflective practices and continuously learn from experience. Appreciate honest feedback and new perspectives. Take responsibility for self-development. Show a sense of humour and self-perspective.	Are self-assured and have a presence. Voice unpopular views and diligently pursue for what is right. Are decisive. Make sound decisions despite risks and pressures.

Self-Regulation				
Self-control	Trustworthiness	Conscientiousness	Adaptability	Innovativeness
Control impulsiveness and upsetting emotions. Composed and positive, even in dire situations. Stay focused	Act ethically and above reproach. Build trust through reliability. Admit own mistakes. Confront unethical actions. Take tough, principled stands.	Meet commitments. Keep promises. Hold themselves accountable for their objectives. Are organised and take care in their output.	Handle multiple demands. Prioritise. Adjust rapidly. Modify responses and tactics to fit fluctuating circumstances. Flexible in stance.	Continuously seek new ideas and solutions to old problems. Produce new ideas. Accommodate fresh viewpoints and risks.

Self-Motivation			
Achievement drive	Group commitment	Initiative	Optimism/ Resilience
Result-oriented. Strong drive to meet objectives and standards Set challenging goals. Take intended risks. Follow information to lessen uncertainty and find methods to improve. Continuously improve.	Make sacrifices to meet organisational objective. Sense of purpose. Use group values in making and clarifying decisions. Actively seek out opportunities to support assignment.	Ready to grasp opportunities. Pursue goals beyond expectations. Cut through red tape and bend rules when necessary to accomplish objective. Organise others.	Diligent in driving goals despite obstacles. Operate from hope of success See setbacks as opportunities to improve rather than personal failure.

Source: Adjusted from Serrat (2017).

Using the same thought processes and literature as basis, the Goleman's soft skill competency behaviours are linked to Serrat's (2017) Social capital employability related elements as presented in Table 4.4.

Table 4.4: Linking Employability Capital Elements to Social Competency Behaviours

Social Skills			
Conflict management	Building bonds	Collaboration and cooperation	Team capabilities
Tactfully handle difficult people and stressful situations. Detect potential conflict, identify points of disagreements, and help reduce conflict. Encourage debate and open discussion. Create win-win solutions.	Promote and maintain extensive networks. Seek out mutually beneficial relationships. Build rapport. Keep others informed. Make and maintain personal friendships in the workplace.	Balance task and relationships Collaborate, share, inform. Promote a friendly and cooperative workplace climate. Detect and cultivate opportunities for collaboration.	Be an example in terms of respect, helpfulness, and cooperation. Involve all members in active and exciting participation. Build team identity, and commitment. Share credit and protect the group and its reputation.
Influence	Communication	Leadership	Change catalyst
Well-developed persuasion skills. Presentations appeal to audience. Use indirect influence for consensus building and support. Effectively transfer and present views.	Effective in creating win-win situations. Adjust message and style to accommodate emotional signs Honestly and straight forward in dealing with difficult matters. Listen, seek shared understanding. Encourage and invite sharing of ideas.	Encourage enthusiasm for shared vision and mission Be willing to lead when called upon. Direct performance of others while holding them accountable. Lead by example.	Recognise the need for change and mitigate barriers. Challenge the status quo to accept the need for change Drive the change and encourage others in its quest. Be an example of the change expected of others

Social Awareness				
Empathy	Service orientation	Developing others	Leveraging diversity	Political awareness
Attentive to emotional signs. Good listener. Sensitive and understanding towards others' perspectives. Assist based on understanding other people's	Understand customers' needs and match it to services or products Seek ways to increase customers' satisfaction and loyalty.	Acknowledge and reward others' strengths, achievements, and development Offer beneficial criticism and identify people's development needs.	Respect and relate well to people from diverse cultures. Understand diverse worldviews. Are sensitive to team differences. See diversity as growth opportunities.	Correctly sum-up important power relationships; Identify critical social networks. Understand the forces that shape views and actions of

needs and feelings.	Offer appropriate assistance. Comprehend and acknowledge customers' perspectives. Act as trusted advisor.	Provide mentorship and coaching for growth with challenging assignments.	Create a workplace environment where diverse people can thrive. Confront bias and intolerance.	peers, clients, suppliers, customers, and competitors. Correctly observe situations and organisational realities.

Source: Adjusted from Serrat (2017).

Bar-On's (1997:14) model of emotional-social intelligence (ESI) defines EI as "an array of non-cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures". The model presents EI as a set of personality trait competencies and combines emotional and social intelligence (ESI) as an integrated set of competencies. It suggests five dimensions on which to evaluate emotional and social competence, namely the intrapersonal, interpersonal, adaptability, general mood and stress management dimensions (Bar-On, Handley & Fund, 2006). The five dimensions are represented by the sub elements of self-regard, self-actualisation, emotional self-awareness, emotional expression, assertiveness, independence, interpersonal relationships, empathy, social responsibility, problem-solving, reality testing, impulse control, flexibility, stress tolerance, and optimism as presented in Table 4.5.

Table 4.5: Bar-On's Emotional Intelligence Model

Skill Group	Soft Skills	Competency
Intrapersonal	Self-awareness and self-expression. Self-regard. Emotional self-awareness. Assertiveness. Independence. Self-actualisation.	To perceive accurately, understand and accept one-self. To be aware of and understand one's own emotions. To express one's emotions effectively and constructively. To be self-reliant and free of emotional dependency on others. To strive to achieve personal goals and actualise one's potential.
Interpersonal	Social awareness. Empathy. Social responsibility. Interpersonal relationship.	To be aware of and understand how others feel. To identify with one's social group and cooperate with others. To establish mutually satisfying relationships and relate well with others.
Stress management	Emotional management and regulation Stress tolerance. Impulse control.	To manage emotions effectively and constructively. To control emotions effectively and constructively.

Skill Group	Soft Skills	Competency
Adaptability	Change management Reality testing. Flexibility. Problem-solving.	To validate one's feelings and thinking objectively with external reality. To adapt and adjust one's feelings and thinking to new situations. To solve problems of a personal interpersonal nature effectively.
General mood	Self-motivation Optimism. Happiness.	To be positive and look at the brighter side of life. To feel content with oneself, others, and life in general.

Source: Adapted from Bar-On et al. (2006).

Barnett's (2004) emotional and social intelligence model postulates EI and SI as outcomes of ten soft skill competencies, namely self-regard, emotional self-awareness, assertiveness, empathy, interpersonal relationships, stress tolerance, impulse control, reality testing, flexibility and problem solving. In addition, an empirical study conducted by Hendon, Powell, and Wimmer (2017) established a correlation between emotional intelligence and soft skills.

Han and Kemple (2006) present social competence as the outcome of personal knowledge and skills that enables the individual to deal effectively with choices, challenges, and opportunities through the six components of self-management, interpersonal knowledge, self-identity, cultural skills, planning and decision-making skills, and adapting social values.

The models discussed show significant overlapping and theoretical support for one another in terms of the elements of emotional and social intelligence. All the models link soft skill competencies to the softer employability capitals of identity, social, and PsyCap. In addition, Han and Kemple's (2006) model suggests that the concept of cultural capital be added as a soft skill competency. Except for Goleman's (1998) EI model, the other models also link elements of human capital to soft skills in terms of problem-solving and decision-making skills. Through these models, it is now possible to link the soft skills in the Bar-on and Goleman models theoretically with the skills postulated in employability capital models and theories discussed in Chapter 3. The integration with Human Capital is presented in Table 4.6.

Table 4.6: Linking Soft Skills to Human Capital through EI and SI Competency Models

Soft Skills	Employability Capital	Bar-on Model	Boyatzis's Model	Barnett's Model	Han et al.'s Model
Planning	Human Capital (Tomlinson, 2017)				x
Problem-solving	Human Capital – System thinking (Tomlinson, 2017)	x	x	x	

Soft Skills	Employability Capital	Bar-on Model	Boyatzis's Model	Barnett's Model	Han et al.'s Model
System thinking	Human Capital – System thinking (Tomlinson, 2017)		x		
Pattern recognition	Human Capital – System thinking (Tomlinson, 2017)		x		
Organisational awareness	Human Capital – System thinking (Tomlinson, 2017)		x		

Source: Researcher's view as derived from various studies.

The next step was to integrate the theory discussed with the personal linked Identity Capital and Psycap which is presented in Table 4.7.

Table 4.7: Linking Soft Skills to Identity Capital and PsyCap through EI and SI Competency Models

Soft Skills	Employability Capital	Mayer et al.'s Model	Coleman Model	Bar-on Model	Boyatzis's Model	Barnett's Model	Han et al.'s Model
Self-identity	Identity Capital (Terry, Hogg, & White, 1999)				x		x
Self-management	Identity Capital (Clarke, 2018)				x		x
Emotional expression	Identity Capital (Potgieter, 2012)			x			
Emotional self-awareness	Identity Capital (Matthews, Zeidner, & Roberts, 2012).	x	x	x	x	x	
Independence	Identity Capital (Ebrahimi & Jahanian, 2014)			x			
Commitment	Identity Capital – Emotional literacy (Resick et al., 2013)		x				
Initiative	Identity Capital – Entrepreneurial literacy (WEF Report, 2017)		x		x		
Innovativeness	Identity Capital – Entrepreneurial literacy (WEF Report, 2017)		x		x		
Conscientiousness	Identity Capital – Personality (Amir et al., 2014)		x		x		
Trustworthiness	Identity Capital – Personality (Amir et al., 2014)		x		x		
Empathy	Identity Capital – Personality (Amir et al., 2014)	x	x	x	x	x	
Self-actualisation	Identity Capital – Personality (Tomlinson, 2017)			x	x		

Soft Skills	Employability Capital	Mayer et al.'s Model	Goleman Model	Bar-on Model	Boyatzis's Model	Barnett's Model	Han et al.'s Model
Assertiveness	Identity Capital – Personality (Amir et al., 2014)			x		x	
Cooperation	Identity Capital – Personality (Amir et al., 2014)		x				
Emotional self-control	Identity Capital – Personality (Amir et al., 2014)		x		x		
Decision-making skills	Identity Capital – Self-efficacy (Ebrahimi & Jahanian, 2014)						x
Self-regard	Identity Capital – Self-esteem (Bates, 1992).			x		x	
Impulse control	Identity Capital – Self-management (Fugate et al., 2004)	x		x		x	
Achievement drive	Identity Capital – Entrepreneurial literacy (Greenberg & Baron, 2008)		x		x		
Adaptability	PsyCap (Youssef-Morgan & Luthans, 2015)		x		x		
Optimism	PsyCap (Youssef-Morgan & Luthans, 2015)			x	x		
Stress tolerance/Resilience	PsyCap (Tomlinson, 2017)			x		x	
Self-confidence	PsyCap – Resilience (Schreuder & Coetzee, 2011)		x		x		
Flexibility	PsyCap – Willingness (De Grip, Van Loo, & Sanders, 2004)			x	x	x	

Source: Researcher's view as derived from various studies.

Finally, the soft skills in the Bar-on and Goleman models can be linked theoretically with the skills postulated in Cultural and Social Capital in Table 4.8.

Table 4.8: Linking Soft Skills to Cultural and Social Capital through EI and SI Competency Models

Soft Skills	Employability Capital	Mayer et al.'s Model	Goleman Model	Bar-on Model	Boyatzis's Model	Barnett's Model	Han et al.'s Model
Cultural skills	Cultural Capital (Ang & Van Dyne, 2015)		x				x
Interpersonal relationships	Social Capital (Hogan, Chamorro-Premuzic, & Kaiser, 2013)			x		x	
Adapting social values	Social Capital (Grootaert & Van Bastelaer, 2002)						x
Building bonds	Social Capital (Tomlinson, 2017)		x		x		
Political awareness	Social Capital (Ferris, Perrewé, Anthony, & Gilmore, 2003)		x				

Soft Skills	Employability Capital	Mayer et al.'s Model	Goleman Model	Bar-on Model	Boyatzis's Model	Barnett's Model	Han et al.'s Model
Social responsibility	Social Capital Jackson, 2015			x			
Change catalyst	Social Capital (Goleman & Boyatzis, 2008)		x				
Collaboration	Social Capital (Goleman & Boyatzis, 2008)		x		x		
Communication	Social Capital (Goleman & Boyatzis, 2008)		x		x		
Conflict management	Social Capital (Goleman & Boyatzis, 2008)		x		x		
Developing others	Social Capital (Goleman & Boyatzis, 2008)		x		x		
Influence	Social Capital – Emotional intelligence (Serrat, 2017)		x		x		
Leadership	Social Capital – Emotional intelligence (Mayer et al., 2016)		x		x		
Reality testing	Social Capital – Emotional intelligence (Bar-On, 2006)	x		x		x	
Self-assessment	Social Capital – Emotional intelligence Goleman et al. (2000)		x		x		
Service orientation	Social Capital – Emotional intelligence (Boyatzis, Goleman, & Rhee, 2000).		x		x		
Team capabilities	Social Capital – Emotional intelligence (Serrat, 2017)		x		x		
Interpersonal knowledge	Social Capital – Social literacy (Lievens & Chan, 2017)						x

Source: Researcher's view as derived from various studies.

Numerous studies empirically found relationships and correlations between employability capital and soft skill competencies. Some of these studies are listed in Table 4.9.

Table 4.9: Empirical Relations Confirmed between Employability Capital and Soft Skills

Employability Capital	Employability Capital Elements		Soft Skill Competency	Scholars
Identity	Big 5 personality traits		Emotional intelligence	Mayer, Caruso, & Salovey (2016)
Identity PsyCap Social	Life satisfaction, Self-esteem	Customer relations	Emotional intelligence	(Mayer et al., 2016.
Identity PsyCap Social Human Cultural Zero harm	Emotional self-awareness. Assertiveness. Self-regard. Independence. Empathy. Interpersonal relationship.	Social responsibility. Problem solving. Reality. Flexibility. Stress tolerance. Self-control.	Emotional intelligence	Meshkat & Nejati (2017)
Social Cultural Human Identity PsyCap	Social interaction Self-actualisation. Self-control. Realism. Positivism.	Self-awareness. Self-esteem. Emotional intelligence. Subjective well-being. Workplace performance	Social and emotional intelligence	Bar-on (2006)

Source: Researcher's understanding.

For the purposes of this study, and in support of the study objective, employability can be restated by including the facilitation process of emotional and social intelligence, as follows:

> Employability is a dual concept that involves, firstly, the graduate capital that renders graduate capability and signals employability potential to employers, and secondly, through the facilitation of emotional, social intelligence, and PsyCap, realise competency in the skills required by the organisation to support organisational growth and market relevancy.

Contribution to the study:

Soft skills are important for organisation quality output and success. They are regarded as deemed the most important skills to survive the 4IR, develop an organisation and create a competitive advantage. Numerous considerations flowed from the literature studies considered. It can be concluded that employability capital consists of elements of human, identity, PsyCap, social and cultural capital. Development of these elements is established in capabilities. Capabilities present the signals employers use to predict future skill competencies. Accordingly, capabilities can be considered the potential a graduate possesses for employability. Through further development of emotional and social

competencies, employability capital is established in soft skills and its associated soft skill behavioural competencies.

In conducting the review, a shortcoming was identified in terms of a capital that will support the soft skill of social responsibility in terms of care for the environment and operational safety. The shortcoming is discussed in the next section, and a capital concept to close the theoretical gap is proposed.

4.5 THEORETICAL SHORTCOMING IDENTIFIED IN TERMS OF A CAPITAL DRIVER FOR SOCIAL RESPONSIBILITY

The main objectives of the 4IR are to correct the socio-economic disruptions caused by the previous industrial revolution while creating pathways to increase productivity and ease the organisational pressures on the natural environment (Xu et al., 2018). While new technologies can bring many advances that will benefit the natural environment, Schwab (2017) raises a serious concern in that organisations might not be able to adjust their historical ways. In particular, Schwab (2017:114) calls for the organisation to "together shape a future that works for all by putting people first, empowering them, and constantly reminding ourselves that all of these new technologies are first and foremost tools made by people for people".

Adhering to the call of Walker, Hills & Heere (2017) for employability capability to include societal responsibility for the good of others, a theoretical shortcoming was identified in that care for the ecological environment and workplace safety, has not been theorised, described, or conceptualised in terms of employability capital. The researcher described these two aspects of societal responsibility under the zero harm capital.

Social responsibility has been addressed in various approaches in literature, namely social citizenship and social justice (Schneider, 2009); human resource development responsibility (Wilcox, 2006); social entrepreneurship (Huq & Gilbert, 2013); teaching through curricula (Zandvoort, 2008); systems of regulation (Conlon, 2008); right to employment (Sin & Neave, 2016); job pursuit intention (Leveson & Joiner, 2014); corporate social responsibility (Maon, Lindgreen & Swaen, 2009); and ethical action (Shiel, Williams & Mann, 2005).

In terms of employability, Jackson, (2009, 2012, 2013, 2015), Bar-On, Handley and Fund (2006), as well as Cimatti (2016) refer to social responsibility as a soft skill and briefly link the behaviours of accountability, personal ethics, and organisational awareness to social responsibility skills. Yet, scholarly works fail to explain the concept further. The works also do not acknowledge the complexity of social responsibility in the organisational environment and the variety of capabilities that would be involved in the concept from the employers' voice. A further theoretical limitation is that the concept has not been formulated in terms of the employability capital construct in any scholarly works.

Accordingly, the researcher consolidated care for ecology, workplace safety, and governance into one single capital. Including eco care and workplace safety consciousness into employability capital would bring a deserved focus to these two concepts in terms of employability potential.

The theory under development will be presented in the researcher's contextualisation based on the literature review undertaken. The researcher suggests a capital in the form of the zero harm capital. In the workplace environment, zero harm capital is divided into the two distinct dimensions of eco care and workplace safety. These two dimensions are presented in Figure 4.2 and will be discussed in the next two sections, commencing with a conceptualisation of the eco-care concept.

Figure 4.2: Zero harm capital model
Source: Developed by the researcher.

4.5.1 Eco-care as a Dimension of the Zero Harm Capital Theory

Schwab (2017) advances that organisations demand a new way of stakeholder collaboration, commitment and renewed focus to turn around the devastation caused by organisations on the natural environment.

The CHANS (coupled human and natural system) concept presents the dynamic two-way relation exchanges between human systems and ecosystems. The approach acknowledges that human and natural systems are linked through mutual interactions that can be understood in terms of energy, material, and information flows. Based on the dynamics and complexity in this interactive flow, the development of humans can no longer be considered in isolation from environmental systems (Werner & McNamara, 2007), especially when ecological, environmental care significantly contributes to organisational operations and subsequent growth prospects in terms of products, profits and reputation (Jones & Upward., 2014).

While systems often fail in erratic ways, resilient systems continue to function despite the challenges and disruptions. Amongst others, disturbances in ecosystems that force changes in the system include actions such as deforestation, mining activities, chemical pollution, urbanisation, as well as air and water pollution. The concern of how much human disturbance the ecosystem can restrain to continue functioning optimally (Walker & Salt, 2012).

In digesting the ‘what' and ‘how’ and to give direction for the theoretical underpinnings of eco care capital, the researcher turned for guidance to Kerner and Thomas's (2014) model of social-ecological systems resilience. The model describes the elements of what is termed a resilient ecological, environmental system (EES). Kerner and Thomas (2014) regard an EES as a conglomeration of sub systems and components that includes the environment itself, the organisation, its strategic intents, management policies, legislative requirements, employees, capital invested, attitudes, operations, infrastructure, decision-making, resources, and regulators. A resilient system can recover rapidly and continue functioning even when there has been a catastrophic failure. System resilience is defined as “the amount of disturbance a system can resist or the speed with which it returns to equilibrium” (Kerner & Thomas, 2014:673).

The complex interconnectedness between organisations, stakeholders, policy directions, market drivers, and global industrial revolutions are capsulated in what are described as social-ecological systems (SES). The model presents three status dimensions of an operational SES (for example, a power- generation plant), namely *system stability (*response activities), *system adaptability* when confronted by disturbances/incidents or increased production, and *system readiness* (preparedness)*,* in terms of monitoring and reporting. Risk identification and management, hazard mitigation, situational awareness, and incident recovery activities prescribed in the stability and preparedness dimensions of the system are critical in ecological, environmental management and will become even more so as digitalisation capabilities increase production output (McEntire, 2007). The *system adaptability* dimension then supports the need for urgent consideration that the 4IR digitalisation, global manufacturing drives, and the associated policy direction necessitate.

Changes in the social-ecological systems that potentially might reduce the effectiveness of the ecological environment system should be identified proactively through continuous assessment of new and emerging risks. Once identified, such changes should be communicated effectively to ensure proper mitigation and risk closeout. Therefore, it is necessary to “understand complex physical and social systems, conduct sophisticated outcomes analyses, and offer long-term solutions to recurring problems” (Darlington, 2000:11). The critical enablers for achieving resilience in human-managed systems are described as strong leadership in order to motivate, mobilise, and provide direction in response to disruptions, situational awareness, proactivity, prevention management, risk identification and management, appropriate response action, and effective stakeholder involvement (Kerner & Thomas, 2014; Ostrom, 2005, 2010).

Eco care capital can be described as initiating through the interrelationship of the ecological environment and the individual's propensity for (i) environmental consciousness and scanning; (ii) proactive risk identification by considering potential operational harm factors through situational awareness; (iii) proactive risk management by putting suitable and timeous mitigation factors in place; and (iv) appropriate and effective response actions when system disturbances do occur while involving all stakeholders positively.

Waugh et al. (2006) found that the effectiveness of incident prevention and intervention programmes is displayed in individuals' interpersonal skills, rather than their technical skills. This confirms the critical role of softer skills in managing workplace safety and the ecological environment.

The identity capital postulated to support eco care involves responsibility, accountability, diligence, morals, values, self-efficacy, and PsyCap. It is further advanced that all the elements of capital driving human interaction will support the collaborative aspect for holistic application in the system.

Kerner & Thomas (2014) hold that resilience theory offers an authoritative paradigm for considering system dynamics within an SES. Within the model, they present a synthesis of decades of scholarly research and approaches to develop the resilience attributes that will illustrate which attributes would support an optimally human-managed system. Skills presented in scholarly works, for instance, those of Britton (2001), Darlington (2000), Lindell, Prater, and Perry (2006), McEntire (2007), Pathirage, Seneviratne, Amaratunga, and Haigh (2012), Thayaparan, Siriwardena, Malalgoda, Amaratunga, Lill, and Kaklauskas (2010,2015), and Waugh and Streib (2006) support Kernell and Thomas's (2014) views. The skills postulated to relate to the expected eco care skills and behaviours are stated as situational awareness through scanning and critical thinking, proactiveness, an attitude of continuous improvement, an orientation of preventative and appropriate response actions through problem-solving skills, networking, social skills, self and other management, project management skills, leadership, conscientiousness, diligence, situational awareness, a hazard- mitigation approach, self-control, communicating across boundaries and stakeholder groups, system focus, risk identification and management, collaboration, and stakeholder management.

By knowing which strategies, actions, and skills will support the SES, managers can direct their focus, decisions, and skill development initiatives to create, support, and maintain the SES (Walker & Salt, 2012). Employability development in eco care will provide direction to graduates on what human behaviour is required to minimise system disturbance.

The wide range of capital involved in these concepts confirms the critical role of graduate attributes in managing the ecological environment. While it is not expected of graduates to be experienced or fully skilled in this concept, they should have to signal at least a propensity towards eco care capital.

4.5.2 Workplace Safety as a Dimension of Zero Harm Capital Theory

Maslow postulated safety needs as an element in his motivational needs theory (Maslow, 1943). In the electricity-provisioning environment, workplace safety is a critical aspect of day- to- day operations. While workplace safety and consciousness have been discussed in the same breath as employability, they were linked only fleetingly (Adeyinka-Ojo, 2018). Manufacturing employers regard consciousness of workplace safety as a leading indicator of employability and consider it as more important than qualifications (Rasul et al., 2013). This view supports the Singapore Workforce Development Agency's employability skill framework, which stipulates safety as a critical skill (Adeyinka-Ojo, 2018).

Jackson (2015) found that employers are reluctant to enter into internships based on risks associated with workplace safety and the management of such risks. Peto and Geddert (2014) offer a solution, namely that workplace safety awareness should be included in the curricula of HEIs. Given the importance of workplace safety to individuals and organisations, the topic demands more research attention.

Considering workplace safety during the 4IR, emerging technologies may have a positive effect on workplace safety as worker ergonomics increase and manual operations decrease. Physical workload will decrease because of digitalisation and new technology, which will assist workers with handling workload and reducing work safety risks (Romero et al., 2016).

However, disagreement is found in the work of Carayon et al. (2015), who raise an important consideration that the mere removal of one hazard does not guarantee a safer workplace or system. They suggest that the removal of one hazard might well introduce another.

The sociotechnical system (STS) theory postulates the primary aim of sociotechnical systems is to develop the quality of working life (Appelbaum, 1997). Structurally, Mumford (2006) argues, an STS has two inter-related sub-systems, of which the first represents technology, equipment, tools, and the workplace. The second represents the social sub-system of work teams, individuals, coordinated activities, control, and management of boundaries. During the interaction of these distinct subsets, the aspect of safety emerges. Carayon (2009) advises that both organisational and psychosocial factors need to be considered when considering the risks and in terms of corporate objectives, safety climates and culture. Carayon et al. (2015) build on this concept and argue that in any revenue and competitive, driven environment, a dissonance will exist between the priorities of production and safety. Such a contradiction in workplaces affects workers psychologically. Hence, Woods's (2006) advice to organisations to include safety as a strategic objective becomes more relevant in the 4IR. The continuously changing working environment, often accompanied by workforce downscaling, will place an additional emotional toll on the remaining employees, which will erode safety consciousness (Carayon et al., 2015).

In their recent publication, Flin and O'Connor (2017) consider the human skills required to ensure workplace safety. They describe situation awareness, preventative orientation, risk identification and management, decision-making, communication, teamwork, leadership, and the capability to manage stress and fatigue as critical skills in safety management. They argue that behaviour can become an automatic flow and consequence of workplace competency. This human inclination supports the notion of 'being my brother's keeper' in the workplace environment to prevent safety incidents in the workplace.

Chaugai, Zakutney, Chan and Adler (2013) argue that curricula structures of HEIs often lack in education on safety and risk management. In dangerous situations, new employees are often expected to learn by trial and error, which could be extremely dangerous in certain industries. Chaugai et al. (2013) propose internships to provide graduates the ideal setting to practise risk assessments and safety practices, under supervision, in unfamiliar and dangerous conditions.

Approaches to developing workplace safety awareness can also include crew resource management training, cross-training, event-based training, critical incident reflection, team self-correction training, and team facilitation training. Flin and O'Connor (2017) advise that a multidimensional- approach would assist in learning transfer. Situational evaluations and review support entrenchment of safety practices. Vinodkumar and Bhasi (2010) advance that regular assessment of safety knowledge, motivation, and skills should be included as a major activity in safety training programmes.

Considering the context in terms of capital, graduates will have to show to recruiters that they can face the 4IR challenges with an attitude of care towards co-workers, both in terms of workplace safety and emotional safety. The meta-competencies of optimism, adaptability and emotional resilience, described under PsyCap, will be key employability potentials to support safety capital.

Both constructs included in the concept of zero harm will need to be developed and tested empirically to render validity for future application.

Contribution to the study:

With the advent of the 4IR, social responsibility has increasingly found its way as a **competitive advantage for organisations through reputational management**. The researcher identified zero harm as a substantial employability capital in terms of social responsibility in the organisation domain. Two dimensions were determined to represent zero harm capital, namely eco care and workplace safety.

Zero Harm Capital traits can be observed in the employability potential signals as presented in Table 4.10.

Table 4.10: Linking Zero Harm Capital Traits to Employability Potential Signals

Zero Harm Capital Traits	Employability Potential Signals	
Governance compliance and ethics	– Compliance with all legislation – Compliance with Governance structural approval – Compliance with policies and procedures	– Ethical decision making
Eco-care	– Ability to identify and manage risk – Hazard mitigation approach – Situational awareness – Proactive – Diligence – Self-control – Collaboration – Communication – System focus	– An attitude of continuous improvement – Orientation to be preventative and not reactive – Problem-solving – Networking – Leadership – Conscientiousness – Stakeholder management
Workplace safety	– Situation awareness – Preventative orientation – Risk identification and management – Decision-making – Communication.	– Teamwork – Leadership – Capability to manage stress and fatigue – Willingness to be 'brother's keeper'

Source: Developed by the researcher.

Having concluded the conceptualisation of the employability elements that support the softs skill competencies, the study focus can now shift to the development of a theoretical soft skill competency framework that can guide the empirical phase.

4.6 THEORETICAL SOFT SKILL COMPETENCY FRAMEWORK

To conclude the literature study, the elements supporting the development of soft skill competencies are conceptualised in a theoretical framework to guide the empirical research phase. While the terms *model* and *framework* have been used interchangeably in past research, Yusof and Aspinwall (2000) offer a simplistic method to distinguish the terms by proposing that a model answers the question 'what is' and a framework answers to the 'how to'. Thus, a framework can be presented as a guide for its users that must subscribe to the following conditions (Soni & Kodali, 2013).

a) It must describe the structural relationships and relevance among the suggested elements and sub elements of the proposed system.

b) The various phases or sequence of the elements or actions needs to be reflected.

c) The framework needs to indicate clearly the connectivity of the different elements and actions of the proposed system in the framework in terms of dependent, independent, and mediating variables.

Such a framework is developed as a potential process flow that is grounded in the underlying and sound theories and constructs presented in the literature study (Jasti, Sharma, & Karinka, 2015). The process involves a comprehensive and systematic consideration of all the identified main theoretical elements, their sub-elements, their relationships, consistent use in theory as well as the placement within the phases, and how the elements relate during the stages (Sinclair, 2007). Supported by the theoretical background, the theoretical framework can be developed and presented schematically to illustrate its components, interactions, and flow. The framework is then ready for testing, validation, and making the required adjustments.

Considering the requirements for developing a framework, the current study performed a comprehensive literature study to identify the various elements and sub-elements, the process flow of development, and the various mediators tested in empirical studies.

The literature study confirmed that employability is represented by three distinct concepts, namely (i) employability capital (capability), (ii) soft skills, and (iii) soft skill behaviours that demonstrate soft skill competency. The following steps were undertaken to derive the elements of the respective three concepts:

Step 1: With the intent to use a generic framework for empirical research purposes, the researcher considered that the road map of graduate employability commences with the development of human, identity, PsyCap, social, and cultural capital categories. Together, these categories form employability capital (Tomlinson, 2018).

Step 2: The theoretical shortcomings were considered in terms of societal responsibility (Cimatti, 2015; Jackson, 2015; Walker et al. (2017) and include the sub-element of zero harm capital in employability capital.

Step 3: The third step involved presenting the elements of employability capital that amalgamate into capability, which represents the potential employers search for (Barnett, 2004; Finch et al., 2016; Han et al., 2006).

Step 4: The fourth step involved considering how capability is transferred to employability skill competency within the workplace. Empirical research indicates emotional and social intelligence act as facilitators to transfer capability to soft skill actions and competencies in work-integrated learning workplace environments (Bar-on, 2006; Bar-On et al., 2006; Jackson, 2013; Navas et al., 2018; Smith, 2012). Emotional and social intelligence are deemed facilitating agents during work-integrated learning interactions and an outcome in the form of soft skills.

Step 5: This step considered grouping employability skill competencies into the soft skills behaviours (Gardner, 2011; Hurrell 2016; Tomlinson, 2017) and hard skill groupings (Bridgestock, 2009; Pool et al., 2007; Van der Heijde et al., 2006).

Step 6: The sixth step involved the identification of environmental influences of the separate capital grouping to give direction to the user to identify the environment affected by the skill groupings (Clayton et al., 2018; Tomlinson, 2017) through direction of literature, as follows:

- Identity capital is the building blocks of soft skill development and can be regarded as the personal emotional functional competencies of an individual (Cimatti, 2016; Lewis, 2016).
- Psychological capital predicts work attitudes and behaviours (Avey et al., 2010). However, the function of meta-competencies is in facilitating the acquisition of functional, cognitive, and social competencies (behaviour and attitude) (Bandura, 1986; Le Deist et al., 2005).
- Social and cultural capital, zero harm capital and human capital are deemed the drivers of soft skill competency behaviour (Serrat, 2017; Tomlinson, 2017; Walker, et al., 2017).

Step 7: The seventh step involved determining the organisational outcomes derived from the different skill competencies.

Step 8: The building blocks of employability (**identity capital**) as indicated In Table 3.2 were derived to formulate the basis of the theoretical model (indicated by the colour **red** in the framework).

Step 9: During this step, the **PsyCap** tools as a facilitator of the specific soft skill competency behaviours, indicated in Table 3.3, were derived and are indicated in the framework in the **green** coloured areas.

Step 10: During this step, **social, cultural, zero harm and human capital** as the drivers of soft skill competency behaviours as indicated in Tables 3.4, 3.5 and 3.7 were incorporated and indicated in the framework with the colour **orange**.

Step 11: The eleventh step was to link the elements of environmental capital to the performance outcomes required by the organisation to survive the 4IR by considering the following:

- Identity capital can be described as the contribution of the 'self' to a positive workplace environment and organisational performance (Cimatti, 2016; Lewis, 2016).

- Psychological capital (PsyCap) provides graduates with the personal tools to survive the demands of the 4IR workplace. PsyCap makes a significant contribution to organisational performance excellence, success, reputation, and increase in profits. A significant contribution of PsyCap is that it facilitates positive work attitudes and behaviour (Avey et al., 2010), supports stress-related situations, and assists in facilitating change (Avey et al., 2009).

- Social and cultural capital is held to govern relationships, establish goodwill, cooperation, customer satisfaction, and cohesive environments, and contribute to economic and social development, a competitive advantage, and good reputation. Teamwork and relations form the foundation of organisational growth, customer satisfaction, good working environments, and a competitive advantage (Hinchliffe et al., 2011; Schwab, 2016; Tomlinson, 2017). Emotional and social intelligence moderate the effects of personality traits on job performance and play a significant mediation role in identity and psychological capital (Navas et al., 2018).

- Zero harm capital directs a competitive advantage for organisations through reputational management, which is a major requirement for organisational growth and sustainability during the 4IR. Zero harm capital is a newly defined concept in this research study that relates to eco care (environment) and workplace health and safety care. Some scholars, for instance, Jones and Upward (2014), Rasul et al. (2013), and Schwab (2018) have loosely described some elements of these concepts.

- Human capital has a strong empirically confirmed relationship with knowledge management, value creation, creativeness, and performance of organisations (Clayton et al., 2018; Crook, et al., 2011).

Step 12: This final step was to allocate flow and interaction arrows to the framework. The **black arrow** represents the flow and interaction of the various employability capitals. **Red arrows** represent the facilitating interaction of emotional and social intelligence during work- integrated learning interactions for the enhancement of employability potential and effect soft skill competency. **Blue arrows** represent the interaction and flow of soft skill criteria. **Purple arrows** represent the interaction and flow of hard skill criteria. **Brown arrows** represent the flow of organisational outcomes derived from skill competency.

Once all steps had been completed and verified against literary works, the framework was developed and postulated as illustrated in Figure 4.3

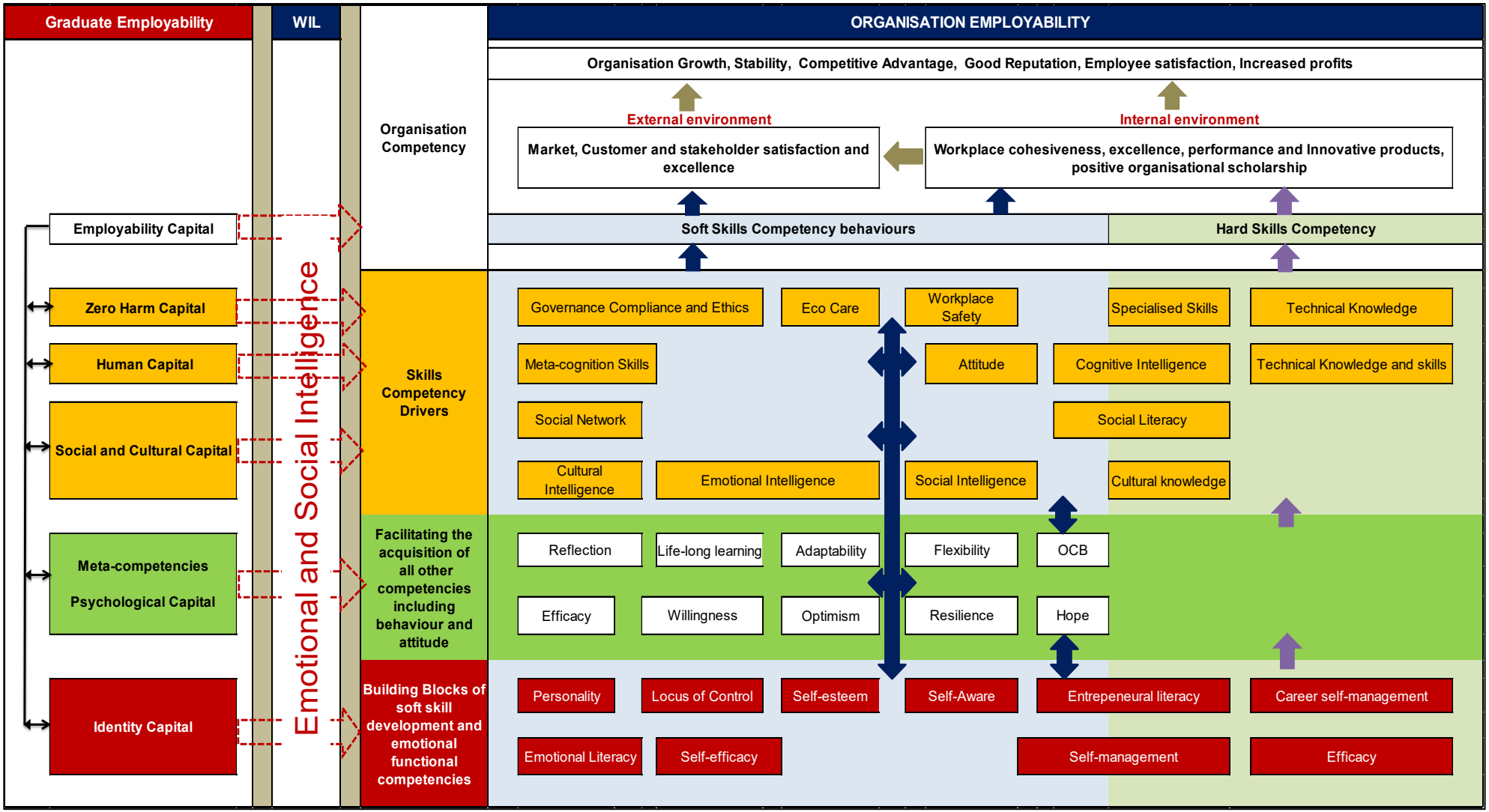


Figure 4.3: Theoretically derived soft skill competency framework

Source: Researcher's conceptualisation.

4.7 CONCLUSION

Various considerations arose from the literature study. Consideration was given to the factors that affect employability. It was established that the 4IR would have a diverse effect on the ability of organisations to survive the market changes without the appropriate response skills. While various theoretical attempts have been made to close the existing skill gap between employers' requirements and graduates' skill propositions, attempts still fall short of addressing employability in a whole- system approach. The reality is that the employability concepts and their interrelatedness are intrinsically complex, as they involve individual factors, personal circumstances, as well as external factors, for instance, labour market factors, macroeconomic factors, vacancy and recruitment dynamics, and policy factors. The demands of the 4IR for new skills and competencies are escalating at a faster rate than ever before. It is predicted that the skill gap will increase in the 4IR. In spite of sufficient evidence in support of employability as an integrated system, few studies have sought to combine the different employability viewpoints into a single, meaningful concept. Therefore, it is argued that the established definitions and approaches limit thinking, as they did not solve the unemployment problem in the First World. A wider approach is required to address the demands of the 4IR.

Existing theory supports the notion that development of graduate employability capability through employability capital will support graduate employability. Identity capital is supported in theory as the building blocks of soft skill competency development. PsyCap is regarded as the critical, high- order skills that facilitate positive attitude and behaviour with the support of meta-competencies. Both social and cultural capital is linked to an organisational competitive advantage, good teamwork and condusive working environments. Emotional and social intelligence moderate the effects of personality traits on job performance and play a significant mediation role in identity and psychological capital

A theoretical shortcoming has been identified in that current literature does not describe a capital in relation to social responsibility towards environmental care and workplace safety. The employability capital element of zero harm is proposed and described in this study to close the literature knowledge gap. The social, cultural, zero harm and human capital elements are described as the drivers of behaviour that is established in both soft and hard skill competency.

Affording the opportunity for WIL, in a real-time workplace environment, graduates can apply the various capital elements to develop the skill competencies required by employers. Theoretical evidence suggests that both emotional and social intelligence facilitate and enhance the transfer of learning to graduates to develop skill competencies.

In addition, empirical evidence supports the argument that enhancing employability capital and soft skill competency behaviour can support organisational growth, render stability and employee satisfaction, support a positive reputation, increase profits, and deliver a competitive advantage when facing the

challenges of the 4IR. The derived theoretical framework would provide valuable support for the study objective. The next chapter describes the methodology and research design utilised to conduct the empirical investigation.

CHAPTER 5

EMPIRICAL RESEARCH DESIGN AND METHODOLOGY

5.1 INTRODUCTION

One of the fundamental requirements for any research study is that the study should be conducted in a soundly, logically and ethically manner to render valid results for generating knowledge. First, this chapter deals with the criteria considered to arrive at an appropriate research paradigm and design. Secondly, the method selected to frame and conduct the research to support the rigorous scientific requirements used for data collection, statistical analysis and interpretation of results in Chapters 6 and 7, is presented. Finally, ethical considerations applied during sampling, data collection, and data analysis, are presented. The chapter concludes with a brief summary.

Grinnell (1993:4) defines the research concept as "a structured inquiry that utilises an acceptable scientific methodology to solve problems and creates new knowledge". A research work commonly consists of two major investigations, namely a literature study and an empirical study. Any research process would commence with a literature study to determine the contexts and concepts guiding the study domain. Such a literature study was conducted and recorded in Chapters 2, 3, and 4.

An empirical research project can be described in a project management framework where an empirical research plan is developed to ensure a successful research outcome. The empirical research plan consists of three parts: – a structural research design plan, a research execution plan, and a results report. Chapter 5 describes how the structural design and the research execution plan were formulated and implemented. The research results are reported in Chapters 6 and 7.

In the structural design plan, decisions are made on (i) which type of research domain is applicable to the study objective; (ii) within the chosen domain, which structural designs/ paradigms are appropriate to solve the research problem; (iii) what type of strategy(-ies) can be employed to conduct the research; and (iv) which techniques can be used to execute the selected strategies.

Once the structural design plan is complete, the researcher needs to draft a plan with methods and tools to implement the designed research structure successfully. The execution plan includes decisions about (i) which population(s) will be able to answer the empirical research questions; (ii) how the researcher will obtain sample(s) from these population(s); (iii) what will be used to collect the information/opinions, and what the structure of the instrument should be; (iv) by what method will the researcher collect the information/opinions of the sample(s); (v) how the collected data will be prepared, evaluated, analysed, and interpreted; (vi) how the researcher will ensure that high- quality data are collected; and finally, (vii)

how the researcher will ensure that no harm is caused during the research process. These aspects are combined to formulate the research execution plan

Following the successful implementation and execution of the empirical design and methods, the research report will be formulated and presented (project management concept derived from the works of Creswell, 2012, as well as Tashakkori & Teddlie, 2003). The layout of the empirical research plan is presented in Figure 5.1.

Empirical Research Plan		
Research Design (Chapter 5) • Reseach type • Research paradigm • Research strategy	Research Methods (Execution) (Chapter 5) • Sampling • Data collection methods • Data analysis • Data quality • Ethical aspects	Research Report (Chapters 6, 7 and 8) • Results • Interpretation • Proposed Framework • Recommendations

Figure 5.1: Empirical research plan

Source: Derived from the works of Creswell (2012), and Tashakkori and Tiddlier (2003).

The next section will discuss the rationale for the selected research design in detail.

5.2 RESEARCH DESIGN

A research design constitutes a plan to conduct the research project. It addresses three overlapping key elements, namely the paradigm (worldview), the strategies to execute the design, and the methodology that will be followed. Each key element of the research plan presents the researcher with various options to consider in the planning phase. To decide which option to adopt, the researcher needs to begin with the research objective and questions, as they provide the researcher with the substance to formulate the best design plan possible to facilitate the study outcome (Creswell, 2009; Saunders, Lewis, & Thornhill, 2012).

The sections that follow will consider the options available in the key elements of the design to make appropriate decisions to support the study outcome.

5.2.1 Types of Empirical Research Domains

The aim of the study guides the decision on the appropriate research domain. Critical organisational challenges necessitate an empirical assessment to support appropriate organisation response strategies

(Dadzie & Boachie-Mensah, 2011). The intention of this study was to find a solution to an existing business problem of graduate unemployability and develop a soft skill framework that could be used to enhance the employability capability of graduate interns in Eskom.

In line with this aim, the empirical study endeavoured to find answers to the following study objectives and associated research questions:

- Determine the employability competencies required by Eskom to support Research Question 5: What are the soft skill behavioural competencies required by Eskom?
- Assess whether the compiled soft skill competency framework is appropriate and valid for developing intern employability competency in Eskom in support of Research Question 6: Do Eskom subject matter experts support the determined soft skill behaviours?

Empirical research is divided into two primary domains – applied and basic research designs. The differences between these two research domains can be found in their purpose, contexts, and methods. Considering the element of purpose, basic research relates to experimental or theoretical work carried out to gain new knowledge of the underpinning concepts of a specific phenomenon or other facts without any intent to apply or use the information/knowledge acquired. In contrast, while the research intent is similar to that of basic research, the objective of applied research is to use acquired information/knowledge to solve an existing problem by employing application. Applied research flows from a specific problem identified by a company/sponsor who sets the research objective to resolve the stated problem (Baimyrzaeva, 2018). It can be concluded that the aim of the current study falls in the research design domain of applied research.

The next section describes the research philosophy and paradigm used to frame the applied research design to conduct the investigation.

5.2.2 Research Paradigm

The concept *research paradigm* denotes “a system of beliefs and assumptions about the development of knowledge” (Saunders, Lewis, Thornhill, & Bristow, 2015: 124). These scholars argue that every research philosophy and paradigm in some way or another adds to the domain of business and management research. However, it needs to be noted that all paradigms subscribe to philosophies that determine their respective characteristics.

When applying the researcher's philosophy to the different paradigms, the researcher will have a clear understanding of how to proceed with the research design to optimise the validity and reliability of the data collected. The main paradigms postulated in scholarly works are positivism, post-positivism, interpretivism, critical realism, and pragmatism. The research objectives were considered against the

individual paradigm characteristics to decide on the design of the empirical research process indicated in Table 5.1.

Table 5.1: Integration of Research Paradigms

Assumptions / Beliefs	Philosophical Identities			
	Positivist	Interpretivist	Critical Realist	Pragmatist
Characteristics	Natural scientist	Artist	Archaeologist	Architect
Research orientation	Verify	Interpret/meaning	History	Create and intervene
Ontology	Real and physical objects. Not influenced by how people feel. Structured.	Socially constructed. Organisation exists of processes, practices experiences, and cultures. Multiple realities.	Real but not physical objects. Structured. High-level problems are results of underlying causes.	Reality is the result of ideas and innovation. Organisation exists of many and complex processes, practices and experiences,
Epistemology (acceptable data sources)	Discover truth through observable and measurable facts. Investigated cause and effect relations. Discovery of the laws that govern behaviour and generalisations.	Focus on stories, interpretations, and perceptions. New views and understandings.	Investigate by considering historical trends, facts and explanations.	Solve problems and inform future practice through interventions. Focus on theories that will contribute to solutions. Practical meaning linked to knowledge. Focus on practices, problems, and relevance.
Axiology: Researcher is:	Objective, neutral and independent.	Part of what is researched. Subjective. Researcher interpretations important to contribution.	Bias risk is known. Attempt to be objective.	Research flow from the researcher's doubts and beliefs. Researcher is impulsive.
Methodology	Quantitative.	Qualitative.	Range of methods to fit problem.	Range of methods to fit objective. Mixed or applied.
Design	Structured.	In-depth structured.	Unstructured.	Structured.
Data source	Experiments, survey.	Interviews.	Archival, historic.	Any to fit the objective.
Sample	Large and structured.	Small.	Various to fit the subject matter.	Various to fit the subject matter.
Results	Inferential statistics.	Interpretations.	Trending.	Practical solution.

Source: Adjusted and expanded on the view of Saunders et al. (2015)

From the above consideration, it is evident that the study objective to create a soft skill competency framework to offer a practical solution or vehicle for enhancing employability of graduate interns at Eskom is supported by a pragmatic research approach, especially because the framework is intended as an intervention to be implemented in future practices and is based on existing and new theories. As confirmed by Powell (2001:884), for a pragmatist, "the mandate of science is not to find truth or reality, the existence of which is perpetually in dispute, but to facilitate human problem-solving".

In addition to supporting the overall study objective, the approach offers the advantages of using inductive, rational experimental methods to quantitatively and qualitatively collect, analyse, validate, or reject information to support the research questions. It also provides for different forms of data collection and analysis by using both rigorous qualitative and quantitative techniques to examine real-life contextual views, cultural influences and multi-level viewpoints (Tashakkori & Teddlie, 2003).

One of the major features of the pragmatic approach is that it provides a bridge between the qualitative and quantitative approaches (Morgan, 2007), as presented in Figure 5.1. The quantitative approach links objective data and theory by means of a deductive process to provide generalised findings. In contradiction, the qualitative approach provides subjective contexts by means of inductive reasoning. The pragmatic approach provides the space where quantitative and qualitative results can be combined into sense-making and rigorous inferences through abduction and intersubjectivity for transferable conclusions.

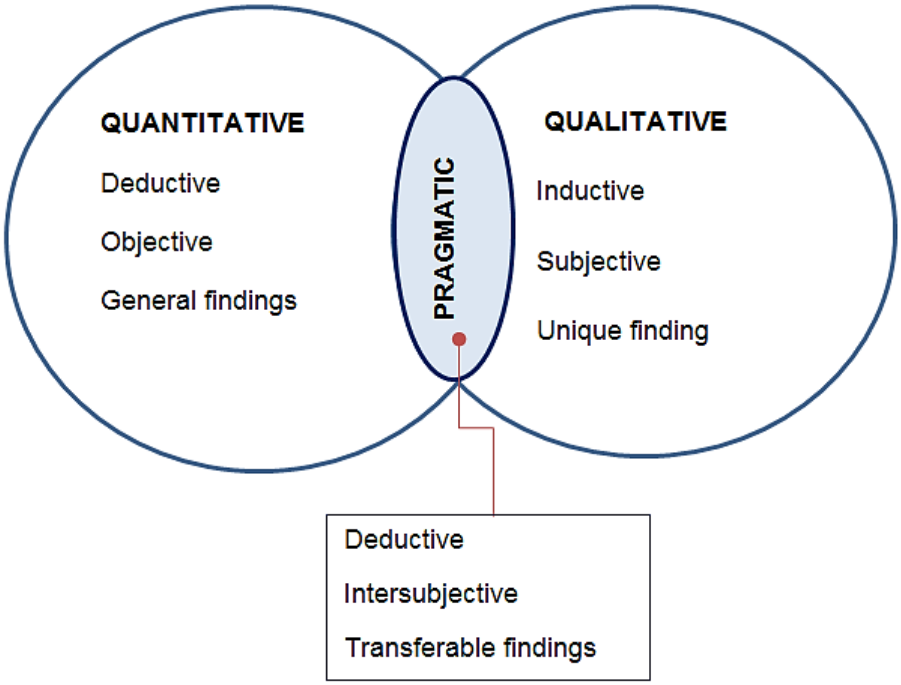


Figure 5.2: Pragmatic methodology bridge between the quantitative and qualitative approaches
Source: Adapted from Moore (2007:71).

An important step is to decide which strategy will be used to execute the pragmatic research paradigm.

Research strategies are processes used in executing the research paradigm that assist in answering the research questions. As indicated in section 5.1, the study needed to address Research Questions 5 and 6. The next step was then to decide which strategy would be most suitable to (i) determine the soft skill behaviours required by Eskom graduates to be deemed employable and (ii) obtain expert validation and consensus for the determined soft-skill behaviours.

The main research strategies reported in the literature refer to quantitative, qualitative, and mixed methods (Babbie, 2011). The strategies include various options of sampling, collecting data, analysing analysis and ensuring validity. Table 5.2 distinguish between the characteristics of the different strategies.

Table 5.2: Comparison of the Research Strategies

Characteristic	Quantitative	Qualitative	Mixed-method
Theory contribution	Deductive.	Inductive.	Deductive and inductive.
Data collection method	Impersonal. Measuring scales. Closed questions.	Personal interviews/ Open-ended questions.	Measuring scales and personal interviews. Open-ended and closed questions.
Collection reach	Indirect over vast geographical areas.	Direct.	Indirect/Direct.
Data collected	Objective.	Subjective.	Objective and subjective.
Data type	Numeric / quantifiers.	Words / descriptions	Numeric / quantifiers and words.
Data analysis	Descriptive and Inferential analysis.	Grouping, coding, compare, evaluate.	Involves descriptive, Inferential analysis as well as grouping, coding, compare, evaluate
Results	Generalisable.	Unique to participant classes.	Generalisable and unique to sample.

Source: Adapted from Bryman (2008).

From the clarification above, it is evident that the study would entail a mixed-method strategy with different processes to answer the applicable research questions.

5.2.3 Mixed- method Research Strategy

Traditionally, either a quantitative or a qualitative design was regarded as sufficient to investigate a research problem (Babbie & Mouton, 2001). Quantitative methods are useful for determining the extent of understanding the predictors or elements associated with a concept for implementation. On the other hand, qualitative methods are used to discover or acquire deeper understanding, provide evidence for

practice, or to find strategies for assisting in operationalising a concept. However, as the complexities of organisational problems escalated in terms of global and societal influences, it became necessary to evaluate a phenomenon from different angles and obtain reliable research results to address these problems appropriately. Hence, it became beneficial to use a combination or mixture of research strategies (Creswell, 2015; Tashakkori & Teddlie, 2003).

A mixed-method strategy is described as “one that combines both quantitative and qualitative data collection and analyses in a single study” (Creswell & Plano Clark, 2007: 5). Quantitative data collection techniques include various forms of surveys (Nardi, 2018). The technique allows for the quantification of data that can be used in both descriptive and inferential statistical analysis to formulate facts, confirm hypotheses, derive conclusions, determine patterns and generalise results from the sample data to a population (Smallbone & Quinton, 2004; Tuli, 2010).

In addition, qualitative data offer the opportunity to gain an understanding of underlying reasons, and motivations to advance or support the ideas gathered through quantitative research. It primarily provides insights into the problem and discovers trends in beliefs, views, and experiences of the participants. The data-collection techniques may vary between unstructured or semi-structured techniques, including focus group discussions, individual interviews, and participation/observations. Another method of opinion collection is by means of open-ended items in a survey format. Once collected, the written opinions are evaluated by means of sorting, coding, and categorising before mixing and interpretation (Creswell & Plano Clark, 2011).

Various justifications support the selection of mixed-method research design. Its core consideration is that the combined use of quantitative and qualitative approaches draws from the strengths of both strategies and provides a more integrated and in-depth understanding of research problems than each individual strategy alone. Accordingly, the researcher can address the phenomenon under investigation at different levels, compare quantitative and qualitative data, gather rich, wide-ranging data, and provide methodological flexibility.

The strategy also faces some criticism. While the pragmatic philosophy advances this research approach, Denzin (2012) criticises the mixing of methods because scholars tend to treat one method as superior to the others. The concern is shared by Tashakkori and Teddlie (2010), who warn that treating one approach as subordinate to the others can lead to bias. Another risk highlighted is that the process is time-consuming. Multiple data collection, analysis, and interpretation raise a risk in that the multiple data can raise confusion during analysis and presentation of findings. Further concerns are that mixed methods are challenging to implement, particularly when assessing complex interventions that need increased resources to plan and conduct the study (Beerbaum, 2016). Irrespective of the disadvantages, Quinlan and Quinlan (2010) advocate the mixed- method strategy as one that offers robust conclusions of social and organisational problems. This allows comprehensive understanding of the phenomena and stronger

conclusions, making it an appropriate tool to use in compiling a business-associated framework directed at enhancing a concept (Ngulube, 2015).

In considering which mixed-method strategy to employ in determining the soft skill behavioural competencies required by Eskom, the researcher evaluated the four main types of mixed methods, namely explanatory, exploratory, triangulation, and embedded designs. The selection of an appropriate type is based primarily on three decision considerations, namely timing, weighting and mixing (Creswell & Plano Clark, 2007).

Timing decisions are based on the sequence in which data will be collected. It can be collected in two ways, namely concurrently (simultaneous quantitative and qualitative) or sequentially (any one of the techniques first, followed by the others). Within the four mixed-method types, six central types of mixed-method designs have been identified in the literature – three concurrent and three sequential designs. They include sequential explanatory, sequential exploratory, sequential transformative, concurrent triangulation, concurrent nested, and concurrent transformative designs (Creswell & Plano Clark., 2007).

Weighting decisions refer to the importance assigned by the researcher to the quantitative and qualitative collection methods when considering which data set would represent the primary or supportive data in answering the research question. The weight might be equal or unequal (Creswell & Plano Clark, 2007).

The final consideration relates to how the data will be mixed in the process. Mixing refers to the point at which the data are combined in the taxonomy process to add optimal value to the interpretation process. Concurrent mixed-method designs collect both quantitative and qualitative data in one exercise, but the researcher has the choice to analyse the data separately before mixing or combine the data sets directly after collection to analyse them together. Three approaches can be employed in mixing data, namely merging, embedding, and connecting data (Ivankova, Creswell, & Plano Clark, 2007).

In considering the most appropriate type to employ the mixed-method strategy, the researcher considered the three questions according to the characteristics of each type as presented in Table 5.3.

Table 5.3: Consideration of Appropriate Type of Mixed Methods Strategy to Use

Mixed-method Type	Timing of Collection	Weighting	Mixing	Purpose

Sequential explanatory	QUAN followed by QUAL.	QUAN usually dominant	At interpretation to connect both data sets	Use data to select best
Sequential exploratory	QUAL followed by QUAN.	QUAL usually dominant	At interpretation to connect both data sets	Generate scale or typology. Explore unknown field.
Sequential transformative	Either QUAN followed by QUAL or QUAL followed by QUAN	QUAN or QUAL or equal	At interpretation to connect both data sets	Change orientated
Concurrent triangulation	Concurrent	Preferably equal but can be QUAL or QUAN	Usually during analysis but can be at interpretation	To compare
Concurrent nested	Concurrent	QUAN or QUAL	During analysis	Generate scale or typology. Explore unknown field.
Concurrent transformative	Concurrent	QUAN or QUAL or equal	Usually during analysis but can be at interpretation	To derive a framework from a conceptual model for empowerment or change to address a specific problem

Source: Creswell, et al., 2003; Creswell and Plano Clark, 2007.

The mixed-method concurrent transformative method strategy is the most appropriate strategy to execute the research design.

5.2.3.1 The concurrent transformative strategy

As highlighted above, the concurrent transformative method is predominantly guided by the researcher's defined theoretical viewpoint, as presented in Figure 4.3. Accordingly, the concurrent transformative process is the method selected to answer Research Questions 5 and 6. The theoretical argument is mirrored in these research questions and problem statement. Accordingly, it represents the core consideration criteria in the research process – through-out the planning, execution, interpretation, and reporting phases of the research project (Tashakkori & Teddlie, 2003).

An added advantage is that the concurrent transformative method design may incorporate some of the triangulation or nested design characteristics, as it shares common features, strengths, and weaknesses. The flexibility of the design makes it most appropriate for framework development, as it allows the respondents a secondary voice through the addition of open-ended questions in a quantitative survey, which otherwise would not have been possible in phenomena studied primarily by means of quantitative

data collection. It further makes provision for triangulating the separated data sets to congregate information in a manner that reflects differences of opinion (Tashakkori & Teddlie, 2003).

Within the concurrent transformative method design, the study made use of two separate data collection methods. The first data-collection process uses a single questionnaire to collect the primary quantitative data concurrently with close-ended questions as well as the qualitative data by means of an open-ended question to add omitted skill behaviours and opinions and highlight quantitative information. The method was deemed the most appropriate to answer research question 5 namely,

> What are the soft skill behavioural competencies required by Eskom?

Even while the qualitative question might be used as supplementary to the survey, it also provides valuable information in validating the quantitative data. Different methods are used to analyse quantitative and qualitative data, which will be discussed later. Accordingly, the data were merged only during the interpretation stage to provide a more holistic view in answering the research question (Creswell & Plano Clark, 2007).

The second data-collection process within the concurrent transformative method design involved a qualitative Delphi-method. The method was deemed the most appropriate to answer research question 6 namely,

> Do subject matter experts of Eskom support the determined soft skill behaviours?

A further advantage of the concurrent transformative mixed-method strategy is that it supports the alignment of the study intent with the guiding theory. The theoretical model derived in section 4.3 would guide the development of the soft skill competency framework.

The concurrent transformative mixed-method strategy that was followed to determine the soft skill behavioural competencies required by Eskom is presented in Figure 5.3.

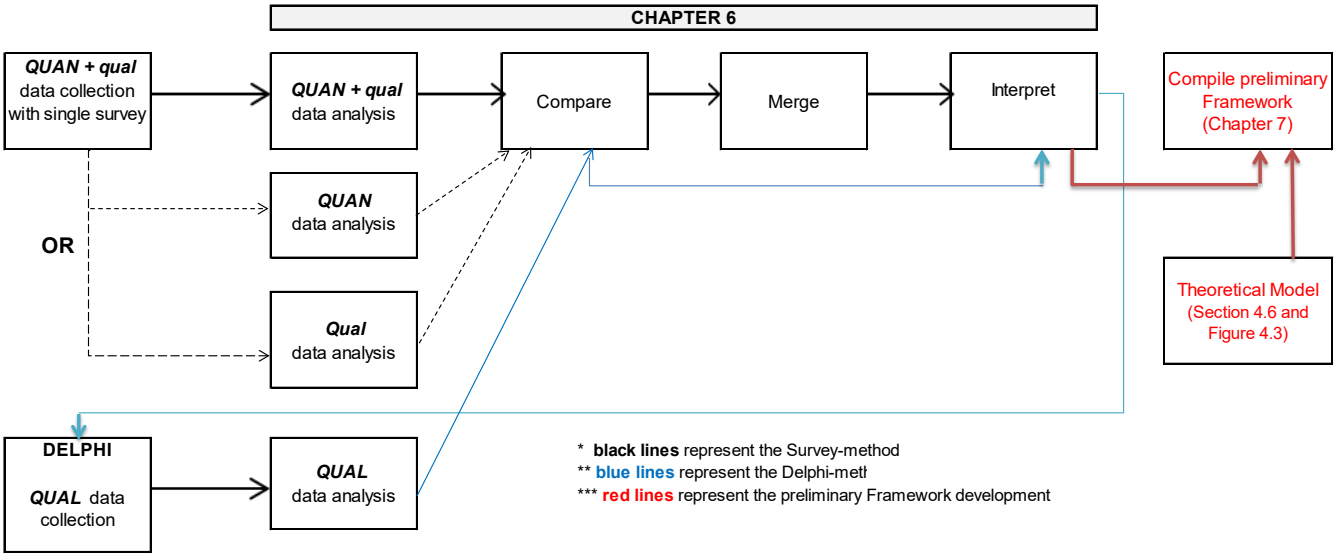


Figure 5.3: Research taxonomy for the concurrent transformative mixed-method strategy followed
Source: Adapted from Creswell and Plano Clark (2011).

The next section consolidates and presents the derived research design plan.

5.3 RESEARCH METHODS

Research methods entail the processes and tools used to follow the research methods or techniques identified in the research design planning phase. It involves collecting data, data analysis, and formulation of interpretations that would answer the research questions (Creswell, 2008).

The process also involved deciding which measuring scales would be suitable for data collection, who the population would be, how they would be selected (sampled), which method would be used to collect the data, how the collected data would be analysed and validated, and how the researcher would ensure the ethical research requirements were met during the research process (De Vos & Strydom, 2011; Ivankova et al., 2007).

Every process of research execution, from data collection, evaluation, and management thereof, to inferences and conclusions, is dependent on the quality management of the execution process and data collected (Creswell et al., 2011). Before commencing with planning the execution process, the quality requirements in support of quality research outcome in terms of sound, valid, reliable, credible, and trustworthy data evidence, should be closely considered (see section 5.3.5). Therefore, due diligence should be applied to ensure that every process and action during the execution comply with the aim of the research.

Research is also subject to ethical requirements with the distinct intent to prevent harm to all stakeholders involved in the research process. To ensure compliance with quality and ethical requirements, the researcher conceptualised the requirements to determine how it should be incorporated in the execution

process and activities. The requirements incorporated throughout the planning and execution phases are summarised in section 5.3.6.

The next section commences with a discussion of the selection of the study populations and their sampling.

5.3.1 Sampling

One of the critical quality checkpoints in any empirical research is to ensure a clear understanding of the target population that can contribute to the research outcome required to solve the problem. Failure to select the correct population will render invalid, not credible results and be a waste of resources.

A population is described as a group of individuals selected from a general population who would be appropriate to contribute to the subject being studied (Babbie & Mouton, 2011). Asiamah, Mensah and Oteng-Abayie (2017) describe it as the source of evidence in conducting empirical research. Accordingly, the credibility of the source is of cardinal importance. Creswell (2013) warns that the population specifications for quantitative and qualitative differ. The population in quantitative studies should be appropriately large and represented by individuals who have a direct influence or interest in the problem under investigation. These individuals are not required to describe experiences or subjective opinions. The respondents would be required to evaluate predetermined statements and select a preferred quantifiable response or priority from among options linked to a statement.

In contrast, the population required for qualitative research participation involves individuals who can render in-depth understanding and expert opinions on the research problem. The individuals are not presented with predetermined statements to select an option of response, but personally participate in the process by presenting views and opinions in words of a topic under discussion (Denzin & Lincoln, 2011). Qualitative and quantitative designs would then require different population selection criteria.

Once the selection criteria have been determined and a target population has been selected, a sampling process can commence. Whether the decision is to employ a quantitative or qualitative method, the aim of the sampling process remains the optimisation of the validity of the research (Morse & Niehaus, 2009).

Sampling is described as the process of selecting individuals from the predetermined population of interest so that, by studying the sample (Babbie et al., 2011), the researcher may generalise the study results objectively to the population from which the sample was selected – given that the sample size supports the validity of the data collected.

The sample size should be appropriately representative for various reasons. One such reason is that the sample size can have a significant effect on the sensitivity of statistical tests as well as the reliability and validity of the research study. While the sample size generally depends on the research objective, a rule

of thumb is that the larger the sample, the higher the probability of responses and the greater the rigour (internal validity) of the data responses (Babbie et al., 2011).

Literature reports two main types of sampling methods, namely probability and nonprobability sampling. In probability sampling, every member of the population researched has a chance of being selected for the sample. This is the most conventional method used in survey research as it allows generalisation from the sample to the population. In nonprobability sampling, the likelihood of a population member being selected for the study sample is unknown (Saunders, et al., 2012). Within these two main sampling methods, various types exist, depending on the research aim and research techniques selected to execute the research plan. One of the critical contributors to ensure study reliability is that the correct population is sampled by means of an appropriate sampling method. Therefore, the sampling method and process should be considered and planned carefully.

The population and sampling methods employed in the execution of the study are discussed next as part of the selected research methods.

5.3.1.1 Population and sampling selection for the survey

The purpose of the study demanded that Eskom employees be selected as an interested party in consideration of the population. However, not all Eskom employees had a direct interest in intern development or the skills required to ensure the effective execution of operational strategies. This interest criterion qualifies an employee as a target population member (Creswell, 2013a).

The following question must be answered by the end of the process: Which soft skill behavioural competencies does Eskom require with the aim to develop interns in these skills? Accordingly, the next selection criteria were considered:

1) Which Eskom employees are responsible for developing interns?
2) Which Eskom employees are responsible to consider the appointment of interns with the appropriate skills capability to support the operations of the organisation?
3) Is a minimum sample size required to ensure validity of the research outcome?

Consideration indicated that two populations had interests in developing interns and capability assessment for the appointment. The first target population was the Eskom supervisors who were responsible to develop placed interns. The inputs of supervisors were critical to bringing focus and relevance in determining the employability competency behaviours required by the interns.

The second target population was managers (M) responsible for departmental operations and staff appointments. Included in the managerial band were professionals (P) and specialists (S) responsible for specialised- and succession development. This group is referred to in Eskom as the MPS band, whose

inputs were essential in determining the employability competency behaviours required to execute the Eskom strategic intent and the skills needed to succeed.

Prior to sampling, literature was interrogated to determine if any analysis tools were involved in developing a framework that would require a minimum sample response quantity. This would enable the researcher to determine a potential minimum sample size requirement. It was found that framework development required the use of the statistical analysis tool of factor analysis. Its function would be to reduce unnecessary or duplicated data and assist with categorising quantitative items by means of correlation statistics (Bryant & Yarnold, 1995). Factor analysis requires a minimum response return of 200 to support validity of item categorising (Brown, 2014).

Simple random sampling was used to sample the respondents from the two populations. The advantage of this sampling method is that it is associated with the minimum amount of sampling bias, which allows for increased validity and proper generalisation of the study findings. While it was not the intention of the study to generalise the results to other organisations, the findings might be of interest for generalisation to the general Eskom population. However, a disadvantage of random sampling is that it is not possible to identify the individuals who can add additional value to the process based on their experience beforehand (Alvi, 2016).

Sampling was conducted by using the Microsoft Outlook 2010 Eskom address book, which indicated employees' functional positions in the organisation. However, the address book shown that many employees did not indicate their functional roles in the address book. All email addresses indicating the functional roles of manager, professional, specialist, and supervisor were selected. The role of supervisors was indicated against 493 email addresses, while the roles of MPS were indicated against 830 email addresses. Combined, the sampling method reported email addresses of 1 323 MPS and supervisors. Provisioning a response rate of 40 percent (425 responses), the sample was regarded as an appropriate size.

The email addresses indicating the functional roles of manager, professional, specialist, and supervisor were selected and transferred to the Microsoft Excel 2010 software program. The email addresses were split into the two populations of MPS and supervisors to ensure that sampling of the two groups would be maximised. The random number generator functionality of the Microsoft Excel 2010 software was used to randomly select a representative sample from each population.

A representative sample of 300 supervisor email addresses from a population of 493 was selected for invitation to participate. From the population of 830 MPS email addresses, a representative sample of 763 was selected for invitation to participate in the quantitative study.

Based on the population and at the desired confidence level of 95 per cent with a margin of error of five per cent, the researcher provisioned a response rate of at least 298 responses to confirm internal validity,

but a minimum of 300 responses to conduct factor analysis. One survey would be sent to the samples for simultaneously collection of the quantitative and qualitative opinions.

5.3.1.2 Population and sample selection for the qualitative Delphi method

In a process seeking confirmation of item validity, it is a critical requirement of the Delphi technique that participants should be qualified experts with a thorough grasp of the field under investigation. The selection of suitable experts is the most critical part of the process. According to Alvi (2016), individuals who can contribute to the phenomenon outcome under investigation constitute the population. In agreement, Avella (2016) advises the determination factor should be the individuals who have a professional interest in the research outcome. Further sampling selection criteria proposed, relates to qualifications, academic publications, professional role, experience, professional societies and discipline.

When selecting these expert panels, their experience and qualifications need to be considered (Legendre, 2005). The information of the appropriate target population was unknown to the researcher, because it was not available in the open Eskom domain. Hence, the researcher approached the Eskom Centre of Excellence: Skills Development with a request for assistance in selecting an appropriately skilled and experienced panel of experts from their department, consisting of specialised human resources and/or industrial psychologists. By means of the purposive and snowballing sampling method, initial experts were selected who would then recruit additional participants or name fellow subject matter experts who were then approached by the researcher with a request for participation. This technique is useful in approaching the type of population, which is not freely available, and often presented in a small quantity. An advantage of this method is that it allows studies to take place where otherwise, it might be impossible due to a lack of participants (Alvi, 2016).

Disadvantages of the snowballing sampling method is that it is not possible to determine the sampling error or make inferences about populations based on the smaller obtained sample. However, a small sample is deemed appropriate when its application is not intended for generalisation (Hasson, Keeney & McKenna, 2000).

An appropriate sample size has been debated extensively in literature (Hsu & Sandford, 2007). Little to no guideline exists as to the appropriate sample size in a Delphi process. This might be due to the Delphi survey studies not requiring statistical representation of the sample. Shariff (2015) presents that guidelines for the Delphi sample size are absent because the sample is selected by means of purposive methods and based on the unique research question that should be answered. Accordingly, the researcher should consider the size that will be suitable for the unique characteristics of the study.

However, some scholars, for example Fischer (1978), argue that a too small sample size might render the judgements as not representative. Okoli and Pawlowski (2004) disagree and argue that the quality of the Delphi technique does not rest on the statistical power of the size of the participant group, but rather

on groupthink dynamics to support consensus among experts. This view supports Ziglio (1996), who emphasises that valuable results can be obtained from small panels.

While all efforts were made to secure panel members, only a sample of eight Eskom subject matter experts from the Eskom Centre of Excellence: Resource Development, Human Resources (Learner Programme), and Eskom College lecturers could be selected and approached with a request for participation.

In the next section, the processes followed to collect data from the samples are discussed.

5.3.2 Data Collection

Kabir (2018:202) defines data collection as "the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes".

The aim of data collection is to obtain quality evidence in support of research integrity and the study objective. Data is collected by following various strategies, amongst others, surveys, interviews, observations, surveys, experiments, and case studies. The most popularly used are surveys, questionnaires, and interviews. Each collection method has its own processes, tools, and quality requirements (Creswell, 2013). The data collection of the selected research techniques is discussed separately in the next sections.

As indicated in the research design plan, data would be collected by means of a single survey and a Delphi (see Figure 5.1). The data-collection process commenced with a consideration of the type and format of data required to satisfy the desired outcome.

5.3.2.1 Data collection with survey

The survey method was selected to provide the answer to which soft skill behavioural competencies were required by Eskom. A requirement for validity of the survey results was that the instrument should at least state a provisional list of soft skills obtained from literature and/ or existing data- collection instruments. In the next section, the process followed to plan the measuring scale used to conduct the survey is explained.

5.3.2.1.1 Development of the measuring scale

The development of a measurement scale can be a complex undertaking. Therefore, the researcher approached the development of the scale systematically.

A critical requirement in research is that the respondent must give consent to participate in the study. Part 1 of the scale represented a section where the respondent could consent to participate by ticking agreement or non-agreement for the following close-ended questions tabled in Table 5.4:

Table 5.4: Consent to participate

Consent Aspect	Yes	No
I have read and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study.		
I confirm that the person asking my consent to take part in this research has informed me about the nature, procedure, potential benefits and anticipated inconvenience of participation.		
I understand that my participation is voluntary and that I am free to withdraw at any time without penalty.		
I am aware that the findings of this study will be anonymously processed and reported in a research report, journal publications, and/or conference proceedings.		

Source: Compiled by the researcher.

The second point of interest in a research study is the characteristics of the research sample who participate in the research study. Interrogating demographic information presents the researcher with deeper understanding of the data responses. Accordingly, the demographic information of the respondents was formulated as closed questions in Part 2 of the scale. Respondents were requested to indicate their participation role of MPS or supervisor, age, gender, racial grouping, qualification, province based, business unit represented, as well as departmental output. Age criteria were presented in intervals for deeper analysis and interpretation.

Part 3 of the scale turned to the major aim of the collection process and presented the soft skill behaviours as closed-question statements to be judged by the respondents for inclusion in the soft skill competency framework and the importance ranking of each skill for the business.

Validity assurance was critical during this part, as the researcher had to ensure that the construct set out to be measured, was indeed reflected during evaluation of results and drawing conclusions (Drost, 2011). Accordingly, the researcher considered alignment of the measuring instrument with the intended outcome, by requesting respondents to consider:

- if the stated skill behaviours apply to the skill requirements of Eskom ;
- if it was applicable, to what degree it was important; and
- if any skill behaviour was deemed essential, but not listed, to include it in Part 4 of the scale by adding or stating their view (if they wished to do so) and ranking the added skill in the qualitative open-ended question at the end of the questionnaire.

For the development of Part 2 of the measuring scale, Noar (2003) gives the following guidelines for developing quality compliant- measuring scales:

- Appropriate and relevant item selection.
- The correct and clear wording of items and simplicity of the concept.
- Testing and retesting of the same item in multiple ways.
- Including both positive and negative stated items in the scale.
- Repeating items to ensure that respondents pay attention to the items and provide sound responses.
- Measuring the effect of fatigue to determine if scale items towards the end of the scale should be deleted from the data to increase reliability.

Noar's measures were included in the following eight steps used to develop the measuring scale:

Step 1 was to generate a large item pool of skill behaviours for measuring the employability skill construct. To comply with the requirements of a stable set of factors that would reflect the construct under investigation (Worthington & Whittaker, 2006), theoretical works were consulted to generate an item pool of generic skill behaviours. The item pool was derived from existing measuring scales used in associated research as well as respected skills publications issued by OECD (2015) and UKCES (2009, 2014).

The measuring scales used to determine the item pool were the Employer Graduate Employability Skills Questionnaire (Jonck & Minnaar, 2015:234), Graduate Skills and Attributes Scale (Coetzee, 2014) and the Work Readiness Scale (Caballero, Walker & Fuller-Tyszkiewicz, 2011:48-49). All three questionnaires were tested for internal and construct validity as well as reliability, as reported in Table 5.5.

Permission was obtained from Professor Melinda Coetzee at the University of South Africa to use the Graduate Skills and Attributes Scale for the study purposes.

Table 5.5: Validity and Reliability of Questionnaires

Statistical measure	Employer Graduate-Employability Skills Scale	Work Readiness Scale	Graduate Skills and Attributes Scale
Initial items	41	167	64
Final items	41	64	64
Reliability (Cronbach's alpha)	.97	.96	> .70
Factors identified	4	4	8
Factors of internal consistency (Cronbach's alpha)	Between 0.863 to 0.922	Between .88 to .93	Between .75 to .92
Item consistency (Cronbach's alpha)	.40	.93	Between .46 and .79
Construct Type	Multi-dimensional	Multi-dimensional	Multi-dimensional
Construct validity	Confirmed	Initial evidence confirmed	Confirmed
Factors supported by	Matic & Agusaj (2012)	GSA scale	

Source: Compiled by the researcher.

In **Step 2**, the initially derived item pool of 431 skill behaviours was evaluated against determined employability capital in the theoretical soft skill framework (see section 4.6). Duplicated skills were removed. Zero harm capital was represented by five generic eco care skill behaviours. The researcher added two specific skills related to environmental management namely, *Comply with all environmental policies and legislation* and *Anticipating problems before they happen*. Similarly, three specific skill behaviours were added to represent health- and safety- orientated behaviours, namely, *Drive safety consciousness in workplace*, *Take care of own health*, and *Take care of others' safety*.

The final item pool of 255 skill behaviours were represented by 234 soft skill behaviours and 21 hard skill behaviours. The specific hard skill items were retained to provide a balanced view and encourage participation.

Step 3 involved the restructuring of the 255 items into behavioural statements to represent items on the measuring scale. It was important that the wording of the statements would support the predictive quality required. According to Noar (2003), the nature and the wording of the questionnaire are of critical importance to ensure the validity and reliability of the data collected. Care was taken to ensure that clear, user-friendly, and understandable language was used in compiling the items. Vague and unclear statements would allow respondents to apply their own meaning to the statement, which would affect the research outcome negatively. A method to support valid research outcomes is to word certain items

negatively. Negatively worded items do not support the construct under investigation. One item, namely *Over-use of cell-phone or telephone*, represented a negatively worded item. While this behaviour might indicate productivity in some areas, for instance, telemarketing, such behaviour in Eskom practices might be counterproductive. Before analysing the data results, care was taken to reverse-scored the negatively stated item to reduce response bias. The skill was classified as a hard skill and removed from the data set before inferential analysis, as its sole function was to determine data validity.

In **Step 4**, the resulted scale items were aligned and grouped in themes for inferential and comparative analysis. While simplistic comparative analysis was conducted for four hard skill elements based on their importance in the 4IR, extensive analysis was conducted on the 231 soft skill behaviours in support of the study objective.

Onwuegbuzie, Bustamante, and Nelson (2010) advise that, to avoid complexity in data analysis, the future analysis of the data collected with the measuring instrument should also be considered when constructing a measuring scale. Comparing 231 behaviours to derive valid conclusions might over complicate the quantitative analysis, which might lead to invalid or flawed results. For this reason, the researcher embarked on a categorising exercise by allocating the 231 soft skill behaviours to skill competency categories derived from the Bar-on and Goleman models (see Table 4.5). The categorising exercise initially rendered 48 soft skill behaviour competencies. The 48 skill categories were further reduced to 38 by merging similar themes; for example, emotional self-control; emotional expression, independence, and impulse control were joined under self-management.

Interrogation of the Eskom Business Plan showed three strategic initiatives not represented in the item pool, namely ethical, environmental care, and safety- orientated behaviours. Accordingly, the categories were added to the category pool. Another category reduction process was conducted using the soft skill behaviour theoretical framework as guidance (see section 4.6). The reduction process resulted in the original 48 soft skill categories derived from the Bar-on and Goleman models being merged into a final, more manageable 16 categories for analysis. The final soft skill competency categories and their associated number of scale items are presented in Table 5.6.

Table 5.6: Number of Scale Items Representing each Soft Skill Competency Theme

	Adopted Soft Skill Behaviour Theme	Number of scale items		Adopted Soft Skill Behaviour Theme	Number of scale items
1	Adaptability	6	9	KnowYBusiness	8
2	Analytical	10	10	Performance drive	44
3	Communication	11	11	Problem-solving	9
4	Continuous Improvement	9	12	Resilience	7
5	Decision-making	9	13	Safety conscious	4
6	Eco care	2	14	Self-development	13
7	Governance	11	15	Self-management	34
8	Innovation	6	16	Team participation	48

Source: Researcher.

In **Step 5,** the above-mentioned categories were linked to their associated elements of employability capital (see 4.6) for integration of the behaviour statements with the soft skills and their individual employability capital capabilities, as presented in Figure 5.4.

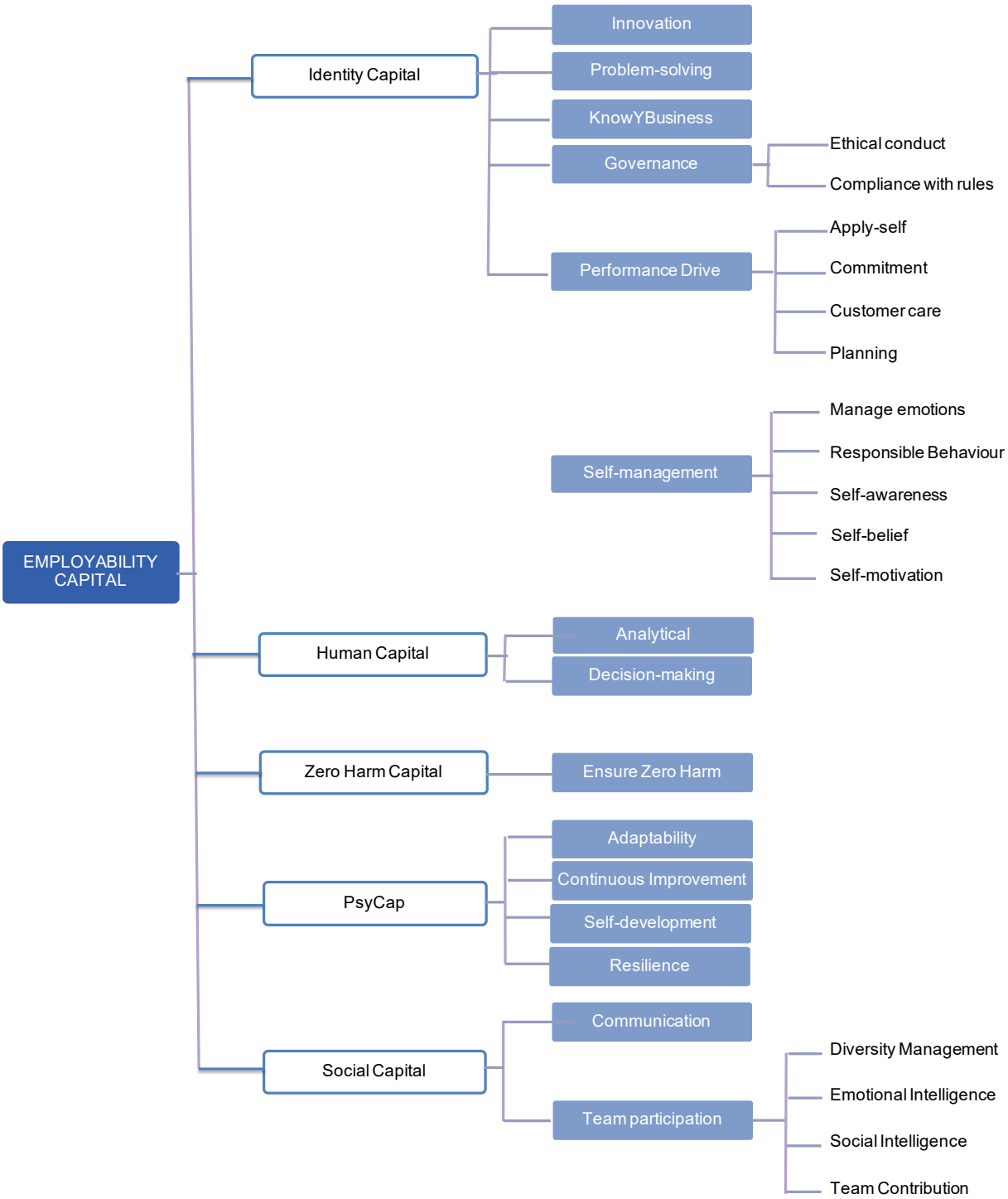


Figure 5.4: Integration of behaviours, soft skills, and employability capital

Source: Compiled by Researcher

In **Step 6**, the measurement of the respondents' opinions about the behavioural skill statements was considered. Measurement involved that the respondents were presented with options from which the best suitable option had to be selected to represent the individual's opinion about the statement. The opinion options had to be meaningful units to allow quantification. The most popular format used in measurement

of quantitative opinions is the Likert scale, which presents the items as declarative statements followed by several opinion options from which respondents can easily select an option to represent their opinions on the statement. Moreover, scaled responses allow the conversion of generic opinions to ordinal data from which inferential deductions can be made. Replacing the opinion option with a numeric value provides the researcher with the tools to extract descriptive and inferential statistics (DeVellis, 2016).

Conflicting views exist on which type of Likert scale to use. The options containing two- to four-point scales are criticised for low validity. However, the risk exists that too many point options might raise uncertainty with the respondent, which might also affect the reliability factor. Accordingly, a Likert-type scale is typically linked in the form of a five- to seven-point scale format. Chomeya (2010) reports that, in general, the six-point Likert scale provides a higher reliability and discrimination trend than the five-point Likert scale does, while seven-point scales often result in results concentrated around the middle point of the scale. The more opinion options are available, the deeper the understanding that can be reached in terms of the variable/item tested. However, while scaled items offer statistical analytical properties, a disadvantage is that individuals might not interpret opinion categories similarly (Babbie & Mouton, 2001).

To mitigate such disadvantage and in line with the finding of Chomeya (2010), the researcher decided on a six-point Likert scale. The respondents had to indicate their opinion on the importance of the stated skill behaviour for Eskom on an ordinal scale containing the not applicable, not important, unsure, important, very important, or critical options. To change the ordinal data to measurable numerical data, the following scoring guide was developed as presented in Table 5.7.

Table 5.7: Score allocation to opinions

Opinion	Score Allocated
Not applicable	1
Not important	2
Unsure	3
Important	4
Very important	5
Critical.	6

Source: Researcher.

Step 7 involved evaluating the completeness of the developed measurement scale to support validity of results. In addition, the new globalised world and cross-cultural workplace make the cross-cultural application of measuring scales challenging (Beaton, Bombardier, Guillemin, & Ferraz, 2000). To ensure completeness of data, all efforts were made to ensure optimal inclusion of the soft skill behaviours identified in literature. However, Beaton et al. (2000) highlight the consideration that different cultures might have different views on tasks as well as how to approach such tasks.

Based on the advice of Creswell (2013), to mitigate the concerns of scale incompleteness and cross-cultural congruence, a qualitative (open-ended) item was added to the quantitative scale. This method is employed often in mixed- method research when the researcher seeks further understanding of certain aspects or understanding of the views raised. The qualitative measure in the measuring scale allowed respondents the opportunity to expand on any opinion raised or add skill behaviours deemed not covered in the questionnaire. In addition, the respondents were requested to rate the qualitatively added skill behaviours. These added skills were evaluated separately from the quantitative skill data set to gain deeper understanding of the stated views.

The final **Step 8** concerned the validity and reliability of the developed scale to deliver sound evidence in terms of the inclusion and importance rating of soft skill behaviours. Validity ensured that the measured behavioural aspects would reflect the intended study outcome. To support the validity of the proposed framework, an opportunity was presented to all respondents to add any omitted skills not listed in the measurement scale in an open-ended question.

Reliability, on the other hand, indicates the degree to which a measuring scale renders stable and consistent results from which the findings can be reproduced and inferences can be made. Reliability is often affected by structural measurement scale errors related to the sampling of scale items. These errors can be limited by increasing the length of the scale. The scale length of 255 items was deemed an appropriate length to limit the risk of structural errors (Rosenthal & Rosnow, 1991).

However, while many scholars agree that longer scale lengths increase the reliability of the scale; the concept of ‘diminishing returns' should be duly considered (Edwards et al., 2002). Referring here to the concept of respondent fatigue, the concept holds that the longer the scale, the higher the risk of respondents rushing to complete item responses without duly considering their responses. Such a scenario could compromise the validity and reliability of the data results. Another risk is that respondents would not consider all the items of the scale but respond selectively (Delport, 2005; DeVellis, 2016).

To ensure that the measuring instrument meets the stated criteria, the developed scale is customarily tested by means of a pilot study. In the pilot study, the questionnaire is sent to a preliminary sample for completion, and then the scale is tested for validity and reliability. Adjustments are then made to increase validity and reliability (Heale & Twycross, 2015).

The researcher encountered a challenge in that permission could be obtained for only two data- collection processes in the organisation, limiting data- collection opportunities. Prioritising the research processes, the researcher selected the mixed-method data- collection process and Delphi panel process for data collection. Testing of the questionnaire in a pilot study had to be forfeited. Therefore, the validity and reliability of the results of the measurement scale could be tested only after data collection. Hence, the researcher had to engage appropriate measures to minimise the risks of not conducting a pilot test in

support of construct and content validity and reliability of the data collected. To support structural validity, the researcher used existing, validated measurement scales and published soft skill research for guidance. The addition of the open-ended question also provided the respondents with the opportunity to add opinions and additional skills deemed absent from the measurement scale. To avoid systemic errors, the researcher subjected the data results to a Delphi technique in which the subject matter experts were requested to validate the results by means of a consensus process.

Reliability was increased further by using predominantly existing tested and validated measuring instruments supported by researched soft-skill behaviours. Internet-based questionnaire surveys were used to ensure that data were collected discreetly (Creswell and Plano Clark, 2007). Questions were derived from the literature review, and at least two questions were incorporated to measure a single construct (Delport, 2005).

To mitigate the random error risks introduced by respondent fatigue, the researcher included items for testing and retesting response consistency over intervals of the scale. Where the intervals indicate that fatigue resulted in consistency errors, the particular items were removed before data analysis.

Systemic errors were mitigated further by eliminating questionnaires in which missing data exceeded five per cent of total items. Missing data (<5 %) were evaluated and replaced with the question mean for analysis purposes. One item was included for reverse scoring, two questions were duplicated for testing and retesting, and six questions measuring similar contexts were included over the scale continuum to measure respondent fatigue. Table 5.8 presents the final characteristics of the developed scale and the measures followed to enhance the reliability and validity of the research outcomes.

Table 5.8: Characteristics of the Measuring Scale used in the study

Structure		Number	Item Numbers

Likert Scale opinion options		6	
Total scale items		256	See Appendix A
	Soft skill behaviours	234	All excluding the hard skill and qualification items presented in Appendix J.
	Hard skill behaviours	21	15, 22, 50, 54, 70, 92, 96, 103, 119, 126, 130, 134, 138, 141, 153, 185, 190, 211, 222, 238, 242, 247
	Open-ended item	1	256
Qualification item		1	15
Stated in the negative for reverse scoring		1	153
Duplicated for fatigue measurement and reliability test-retest data consistency		2	66 & 72 88 & 187
Restated to determine fatigue influence and reliability test-retest data consistency		3	52 & 108 82 & 239 34 & 236

Source: Compiled by the researcher.

Once data had been collected, the measuring scale was tested for construct and content validity. To determine the internal consistency/reliability of the scale, two indicators were determined, namely the Cronbach alpha and the standard error of measurement. These statistical measures are reported in Chapter 6. The criterion validity of the scale was not tested, as the skill behaviours tested were derived from confirmed valid and reliable scales from prominent scholars.

To support the principle of presenting quality and valid data further, the data were collected and stored on a secure Eskom network and server environment with restricted access to ensure the physical security of data (Benfield & Szlemko, 2006).

5.3.2.1.2 Data-collection process followed

In determining the best method to collect the data, the geographical distribution of the selected sample presented a challenge. Suitable data-collection methods for research conducted over vast distances imply the distribution of the measuring scale by Internet or alternatively, by making use of Internet-based surveys. Notably, there is no difference between these two methods. Both collection strategies allow for unambiguity in access to the population samples. The strategy further permits discreet data collection – allowing an increased response rate in support of external validity and transferability. However, the Internet-based survey has the added advantage of ensuring anonymity of respondents (McMillan & Schumacher, 2006), making this a more suitable data- collection method.

The use of electronic survey programs allows instant completion; the collected data are immediately available for analysis, and no intermediaries that could delay the collection process or create a risk to

confidentiality requirements are needed. Such electronic collection process also enhances the validity and reliability of the collected data. Even though the concern is often raised that electronic surveys might result in sampling bias (Aldridge, 2001), this limitation was mitigated structurally, as all the members of the selected populations had access to and were familiar with the Eskom Internet and the required MS Outlook 2010 software. Hence, the electronic survey methodology presented a solution for the researcher to address the distribution of the measurement scale and collection of the data in a timely and organised manner.

Next, an information leaflet and link to the survey were distributed to the sample by means of an invitation email using the Microsoft Outlook 2010 program to participate, together with an information pamphlet explaining the purpose of the study and other relevant information. The link granted respondents direct access to the online UFS EvaSys Survey System Version 7.1 platform, where willing respondents could complete the questionnaire.

5.3.2.2 Delphi data- collection method

The Delphi method is a consensus-developing technique that resorts under the branch of action research designs (Couper, 1984; Vernon, 2009). Of note is that, even while the Delphi method is primarily a qualitative concept, it can have a quantitative element, depending on the aim of the research and the specific application (Avella, 2016). This is possible due to the simplicity and flexibility of the design. Data gathering (qualitative) can be combined with ranking (quantitative) and statistical assessment (quantitative) elements (see Kim & Aktan, 2014). Interestingly, Avella (2016) proposes that researchers might even use a validated quantitative instrument to commence the process. This is supported by Habibi, Sarafrazi, and Izadyar (2014), who advance that Likert scale questionnaires can be used to collect subject matter experts' opinions in qualitative research when the aim is to conclude on the importance of items. In addition, the quantitative techniques enable an in-depth analysis of the collected subjective panel judgments (Linstone & Turoff, 2002). However, they warn that care should be taken that rigour is not compromised in the process.

The Delphi method aims to determine the disagreement or level of concordance between the independent experts systematically over two or more rounds of data collection. In the end, the method presents qualitative confirmatory evidence of peers or experts that the concept defined by the researcher is an accurate representation of the concept under research. The Delphi method is advanced by scholars, for instance, Hasson and Keeney (2011), to ensure content validity of a potential framework.

In contrast to other data collection techniques, the Delphi method uses several iterations with the aim to derive consensus from groups. The technique builds consensus through a succession of questionnaires in which data are collected from a panel of sampled experts, evaluated for consensus, and then returned with consensus feedback to the panel participants. One of the unique characteristics of the process is

that it allows the participants to reconsider their initial judgments against those of the other participants and change their judgement should they wish to do so (Linstone & Turoff, 2002).

Linstone et al. (2002) mention the notable characteristic that the technique offers anonymity to the participants during a controlled feedback process. It offers the added benefit of mitigating group noise resulting in data distortion and influencing of domineering panel members. Each participant has an equal opportunity to contribute and provide further insight into the researched concept.

The method offers various advantages to the researcher in that it is a simple and flexible process, allows participants to share knowledge, encourages deeper thinking, is cost-effective, opinions are easy to collect, and geographical boundaries are not a constraint for participation by panel members. Disadvantages are listed as researcher bias and inexperience to manage the process, panel member withdrawal from the process, and loss of focus on the topic and aim of the investigation (Avella, 2016; Linstone et al., 2002). The disadvantages can be mitigated by means of focused, systematic management of the basic design application process.

The basic design of the Delphi method entails that experienced and subject- related experts, without consideration of rank, level, division, role, or geographical location, be subjected to an emailed questionnaire in two or more rounds. The responses received will be considered and evaluated for concordance. Feedback is provided to the participants in terms of items agreed upon and items reporting little agreement. This gives participants the opportunity to access the opinions of the other panel members and allow them to reconsider their opinions (Linstone et al., 2002). The process is repeated until consensus is reached.

The application of the Delphi method does not come without conditions. Avella (2016) states the requirements for using the Delphi method. Not meeting the following requirements results in a flawed Delphi design:

- The participation of suitably experienced experts in the panel.
- Group consensus to achieve an outcome.
- Anonymity in data collection to mitigate the obstacles of groupthink (Powell, 2003).
- A multifaceted, interdisciplinary, and critical problem.
- An appropriate dispersion of subject experts.
- Feedback to the panel members.

Owing to the requirement of anonymity, the Delphi technique is usually conducted by means of surveys. The basic design of the Delphi method is presented in Figure 5.5.

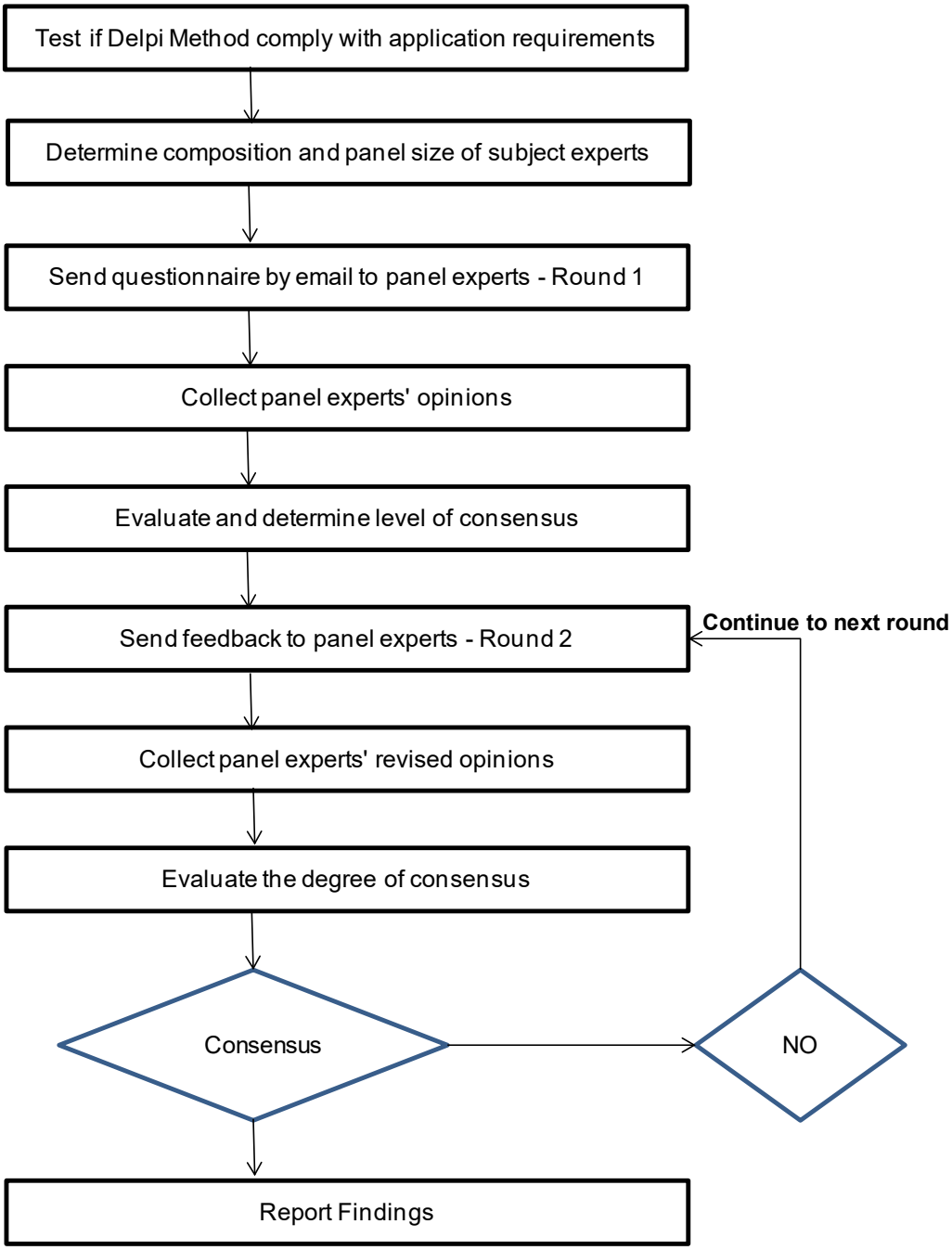


Figure 5.5: Basic Delphi design technique

Source: Habibi et al. (2014).

The strategy was employed by requesting the assistance of subject matter experts in Eskom for judgement quantification (Grant & Davis, 1997). The process entailed that appropriately experienced experts be requested to judge item and 'face validity' in their individual capacity. Face validity refers to the process where subject experts are asked for their opinion as to whether the framework is appropriate to measure the intended concept. To comply with the requirement for judgement quantification, suitable

academic subject matter experts were requested to identify shortcomings for improvement and to validate the developed soft skill framework for appropriateness in terms of structure and application.

Once the survey data had been received, evaluated, and analysed, the list of soft skill competency behaviours (231 items) was restated in terms of their respondent allocated modes in a single Microsoft Excel 2010 file.

The process requirement for panel member anonymity requires that data collection be facilitated by electronic communication (Legendre, 2005). The questionnaire was emailed electronically to the eight sampled experts by means of MS Outlook 2010. A consent form (see Appendix B) and information pamphlet explaining the purpose of the study and other important information were included with the Delphi questionnaire (see Appendix C).

The sampled participants on the panel were requested to:

a) evaluate the soft skill behaviours identified in terms of applicability and degree of importance; and

b) after assessing the skill behaviours, to add any additional skill behaviours they might deem necessary to Eskom but not identified during the first quantitative phase.

Panel participants were informed that they might be required to participate in more reviews to obtain consensus among the panel members. Two weeks was allowed for submission of participants' responses. A second follow- up reminder was sent to the participants with an extension date of another two weeks in an attempt to increase participation.

The next consideration in the research execution was to consider how the data collected would be analysed. The sections following present detail in this regard.

5.3.3 Data Analysis

Data analysis involves the process of investigating, cleaning, quantifying, categorising, and displaying the collected data to interrogate it for interpretation purposes. To support interpretation and render objective and value-added results, statistical analysis was also conducted. Data analysis requires systematic planning to support dependable and reliable data evidence. Aspects that should be considered in the planning process relate to the point at which data sets will be mixed, how data will be prepared for analysis, and which statistical tools and techniques will be used to render quality results for interpretation (Creswell & Plano Clark, 2011).

5.3.3.1 Mixing of data

An important aspect of data analysis in mixed- method designs revolve around the point where the quantitative and qualitative data are mixed. As discussed in section 5.2.3.1 the pragmatic, concurrent mixed-method strategy affords the researcher the choice to (i) combine the datasets directly after collection and analyse it together or (ii) analyse the data separately before mixing for interpretation (Ivankova et al., 2007).

Data analysis in a concurrent mixed-method strategy is described as the process of analysing the different data collections by means of techniques that blend and compare quantitative and qualitative data and their results (Boone & Boone, 2012).

While both data sets have equal importance in the concurrent transformative strategy, the purpose of the qualitative data collection by means of the survey open-ended question was first to assist the researcher in confirming if any important soft skill behaviours had been omitted in the original measuring scale and to add such if deemed necessary. The purpose indicates a secondary role of the qualitative data and by nature of support, any soft skill behaviours identified as absent from the scale were merged with the quantitative data list.

The second purpose of the open-ended question was to obtain a more in-depth view of participants' experiences of soft skills in the workplace. The purpose serves no support interest for the quantitative data but allows the researcher deeper insight into the participants' experiences that motivated the ranking of skill importance during the quantitative process. Accordingly, the responses collected were not merged with the quantitative data but only discussed in a triangulation process with the quantitative results during interpretation.

Similarly, the qualitative data collected by means of the Delphi-process were for validating content of the measuring scale. Thus, the experts were expected to validate if the selected soft skill behaviours and the respondents' opinions about their importance in the organisation were valid. Accordingly, the data collected by means of the Delphi process would be mixed for interpretation purposes only.

5.3.3.2 Organisation of data collected

Critical requirements for data reliability and dependability require that, prior to commencing with data analysis, the data must be inspected, and a cleaning process undertaken to limit measurement errors and support results validity (Gardenier & Resnik, 2002).

Accordingly, the discussion commences with a description of the data management actions followed to prepare the data, followed by the methods used to test the measuring scale and data collected for reliability and validity. Next, the different tests and statistical techniques conducted for interpretation and

conclusion are presented. In the next section, steps followed to prepare data for quantitative analysis are explained.

5.3.3.2.1 Organisation of quantitative data set for analysis

Data preparation involves the changing of ordinal data to numeric scores for statistical analysis, managing missing data and outlier items, removal of duplicated items, and testing for respondent fatigue in item validity.

Figure 5.6 summarises the preparation process followed in conducting quantitative data analysis.

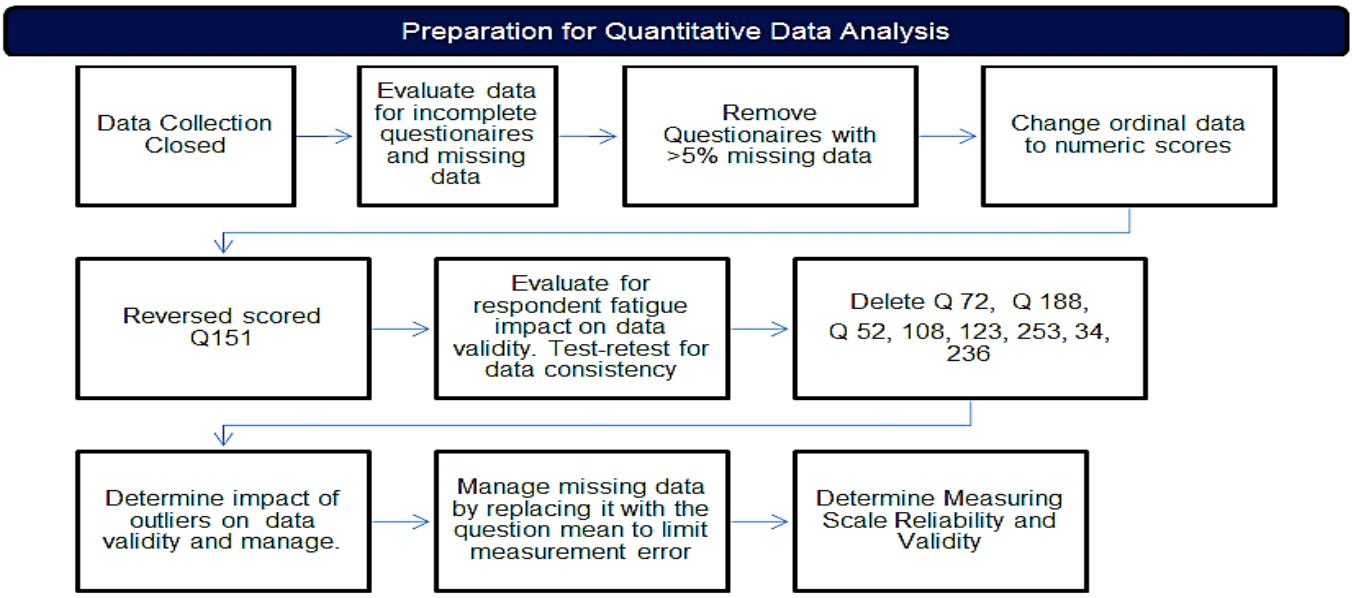


Figure 5.6: Preparation process for quantitative data analysis

Sources: Brown, 2014; Field, 2005; Garson, 2010; Hinkin, 1998; Kaiser, 1970.

The following clean-up actions were undertaken in preparation for analysis:

- Responses of two of the respondents (number 124 and 223) exceeded the pre-set limit of ten per cent missing data with completed items of 71 (30 %) and 93 (39 %), respectively. Accordingly, their responses were discarded. Hence, only 302 surveys of the initial 304 responses were used for analysis purposes.

- One item was reverse- scored (Item 153 indicated in Table 5.8). Evaluation of the item responses indicated the wording of the question was confusing for the respondents. Accordingly, the item was removed to eliminate systemic errors.

- Two duplicated items were removed from the scale once the respondent fatigue factor had been measured (Items 72 and 187 indicated in Table 5.8).

- As a Likert scale was used, which resulted in ordinal opinions, the mode of opinion was used to determine the most rated opinions.
- Data relating to hard skills and qualification items were interpreted, but not included in the database for inferential analysis, as their relevance was limited to demographic information only (Items 15, 22, 50, 54, 70, 92, 96, 103, 119, 126, 130, 134, 138, 141, 153, 185, 190, 211, 222, 238, 242, and 247 indicated in Table 5.8)
- The remainder of the items related to soft skill competency behaviours were subjected to measurement error analysis.

Measurement errors predominantly relate to missing data in responses. These errors are a critical constraint from a statistical perspective, as it affects the validity and reliability of study results. Another concern is that missing data may introduce bias into the result (Gudivada, Apon & Ding, 2017). Several methods are available to deal with missing data. The simplest one is to delete the survey responses that present missing values. However, this method affects the statistical power of the database of responses. Substituting missing values with the mean of the item responses presents another method to deal with missing data. This method increases the sample data considered during statistical analyses and decreases the need for missing data assumptions (Gudivada et al., 2017). Accordingly, the researcher considered the approach to substitute the missing data with the mean response of the question as the most appropriate to support reliability of data.

Data normality is a function of the data distribution and is deemed an important critical assumption in the quality of research results. The nearer the rank to the data mean, the more consensus is reported on the item under investigation. Therefore, outliers present a challenge to the quality of data results. If the data distribution is not normal, it indicates that the data contain problematic outliers that could prejudice the results (D'Agostino, 2017). The Shapiro-Wilk Test was used to determine data normality, while the Grubbs Test was used to determine the effect of the outliers on the data validity (Grubbs, 1969; Royston, 1992).

In a study conducted by Sosdian and Sharp (1980) on why the invited sample did not complete the survey, the majority indicated too many surveys, time and schedule constraints as influences in their decision not to participate. Notably, only one percent said that the survey was too long. Regardless, the long measurement scale necessitated the need to determine whether respondent fatigue might have influenced the research results meaningfully. The test-retest method was used to determine whether respondent fatigue would affect internal validity and reliability. The scale was set up in a manner that allowed testing and retesting of the same variable over intervals for this purpose The Spearman correlation analysis was conducted to determine fatigue influence. A Spearman correlation coefficient can range from +1 to -1. A coefficient of +1 indicates a perfect association of ranks, while zero indicates

no association, and -1 indicates a perfect negative association of ranks. The closer it is to zero, the weaker the association between the item and its category (Bonett & Wright, 2000). A coefficient below 0.40 is considered weak, between 0. 40 and 0.59 is moderate, between 0.60 and 0.79 strong, and above 0. 79 are very strong.

The final process to confirm data validity is to determine the validity of the measuring scale. This process is described in the next section.

5.3.3.2.1.1 Testing of measuring scale to establish data validity and reliability

The validity and reliability of the measuring scale is linked directly to the quality and trustworthiness of the research results. With regard to interdependency between validity and reliability, Nieuwenhuis (2007:80) argues, “there can be no validity without reliability, a demonstration of the former [validity] is sufficient to establish the latter [reliability]”. Some scholars disagree, however. Nunnally (1978) is supported by Bollen (1989), who postulates that while reliability is critical in research, it is not necessarily a requirement for validity. Irrespective of the difference in view, error reduction in findings and inference quality depend on the validity of the data results collected by means of the measuring instrument (Tashakkori & Teddlie, 2003). Accordingly, both quality measures were tested.

The reliability of an instrument reflects the internal consistency (item correlation) where the same concept was measured more than once. Hence, the internal consistency reliability assesses how strongly the scale relates to a similar test item (Tashakkori & Teddlie, 2003). The reliability of the instrument was established by measuring the internal consistency coefficient, Cronbach's alpha. If the coefficient alpha is very low (see Table 5.5), it indicates that the items have little in common (Yang & Green, 2011).

When considering scale validity, three types of validity are found (Brains, Willnat, Manheim & Rich, 2011). Construct validity refers to whether a measurement instrument measures what it is intended to measure. Criterion validity reports the extent to which a measuring scale corresponds with similar scales measuring the same variables. Content validity indicates whether the items in the measurement scale truly measure the construct.

Criterion validity analysis was not conducted in the current study, as the items of the measuring scale had been derived from validated existing scales and scholarly works.

Content validity was established by means of an Eskom panel of experts by using the Delphi technique to derive consensus. The analysis technique is demonstrated in Figure 5.5 and further described in section 6.3.

Construct validity was established by conducting confirmatory factor analysis (CFA). The CFA technique is part of the structural equation modelling (SEM) statistical methods. The powerful statistical tool is often described as a ‘goodness-of-fit’ or relational method that allows the researcher to test whether a

predetermined category or assumptions based on deductive theory fit the data allocated to the category (Thompson, 1997). The behavioural competencies were allocated to the predetermined soft skill competency categories derived during development of the measuring scale (see Table 5.6) and subjected to CFA analysis. The parameters used to determine the goodness of fit are presented in Table 5.9.

Table 5.9: CFA Goodness-of-fit Parameters

Statistic	Explain	Parameter for acceptance
KMO statistic	Suitability of the data for factor analysis.	Value between .50 and .70 is mediocre, between .70 and- .80 is good, between .80 and .90 is great, and a KMO of .90 or higher is considered superb. Values below 0.5 are not acceptable.
Communalities score	Indicates how much of the variance of the item was valuable in describing the category.	The higher the percentage, the higher the validity.
Component factor-loading coefficient	Explains the correlation between the item and the category.	A rule of thumb is that factor loadings < .40 are weak and factor loadings ≥ .60 are strong. If the item loads simultaneously on more than one factor, the second factor must be in excess of 0.30 to be considered a valid alternative. The difference between the primary and the alternative loadings needs to be in excess of 0.20 for the primary loading to be valid. Item correlations coefficient < 0.25 with their corresponding subscale should be considered for deletion
Component/factor score (z-score)	Explains how many standard deviations the items are away from the category mean. The factor score is used to decide if the item should be excluded from the category.	The higher the score, the lower the value contribution will be to the category and vice versa. Low values acceptable for inclusion.

Sources: Brown, 2014; Field, 2005.Garson, 2010; Hinkin, 1998; Kaiser, 1970.

A Spearman correlation analysis was also conducted to determine the reliability (correlation) of the selected soft skill competency categories (see Table 5.6) and their associated behavioural items.

In the next section, the organisation of the qualitative data set for analysis is discussed.

5.3.3.2.2 Organisation of qualitative data sets for analysis

The organisation of the qualitative data was conducted in two separate stages. The first stage entailed the organisation of the data collected with the open-ended question in the survey, while the second stage relates to the data collected during the Delphi-method.

a) Organisation of data collected in open ended question in survey

The technique of content analysis was selected to conduct the qualitative analysis of survey. The technique is discussed in more detail in section 5.4.2.2.

Organisation of the collected data commenced with extracting the qualitative remarks posted by the participants verbatim from the EVA-produced questionnaire report and recording it in a single MS Office 2010 Word document with the questionnaire number allocated to the particular participant to preserve anonymity of the individual. Information about the participant's role (MPS or supervisor), age, and functional role was also transferred for in-depth analysis. The views raised were read methodically to have a comprehensive understanding of the content.

During a manual abstraction process, opinions were identified that did not address the study objective but rather raised grievances about Eskom processes. These opinions were eliminated from the data set. The participants were coded in relation to their number of participation and role as manager or supervisor.

b) Organisation of data collected in Delphi questionnaire

Once the Delphi responses had been received, they were sorted in terms of agreement between the panel participants. An evaluation of the variances presented non-conformity of judgements.

In a second round, feedback was compiled and given to each participant individually by telephonic interview. Changes in judgments were recorded telephonically to mitigate time constraints.

The newly collected data was again sorted in terms of agreement and the non-agreement items tested for statistical conformity. The second round rendered statistical consensus. Feedback was given, but no further rounds were initiated.

In the next section, the analysis processes and techniques used in deriving research results are discussed.

5.3.3.3 Statistical techniques and tools used to analyse data

The mixed-method approach allows for the quantification of qualitative data to investigate differences between groups or group members, which generally are regarded as an acceptable methodology in the pragmatic approach (Hartman et al., 2007; Smith, Bekker & Cheater, 2011).

In mixed-method processes, it is imperative to ensure a reliable study outcome. Therefore, quantitative techniques are usually employed to investigate quantitative variable relationships for generalisation, whereas qualitative techniques are used to render in-depth understanding of participants' experiences presented through qualitative data (Invankova et al., 2007). While different in type and purpose, the

analysis of both data types includes descriptive analysis, ranking, inferential analysis and comparison while avoiding errors to ultimately derive valid deductions (Creswell and Plano Clark., 2007).

The statistical analysis techniques were employed by using the IBM Statistical Packages for Social Sciences (SPSS) Version 25 software. A second analysis process was followed with the advanced Microsoft Excel Realstats functionality to confirm the correctness of the SPSS results.

In the next section, the various analyses conducted in the individual quantitative and qualitative processes are discussed.

5.3.3.4 Analysis of the quantitative data

Data analysis was conducted by considering the survey responses and the demographic information of the respondents first by using basic descriptive analysis.

This was followed by considering the reliability and validity of the measurement scale to ensure that the analysis and interpretations of the main data would be objective and trustworthy by using both descriptive and inferential analysis. Once data quality had been confirmed, attention turned to the analysis of the data sets generated by means of the concurrent transformative mixed- method strategy. The data were analysed separately in two different processes discussed in the next two sections.

A number of techniques are available when analysing quantitative data. Quantitative data is analysed by means of descriptive and inferential statistical measures to provide objective results. Descriptive statistics, i.e. the mean, standard deviation, percentage, and frequency, describe the population based on the full data set. Inferential statistics, i.e. the t-test, ANOVA, and factor analysis, use a sample of the data set to make inferences and predictions about a population under study.

Analyses were conducted in line with the guiding theoretical framework and the soft skill competency categories (see Table 5.6).

Descriptive analysis was conducted to determine whether the responses returned met the requirements for survey validity and reliability in terms of response rate.

The demographic information of the respondents was analysed and presented to render in-depth understanding of the sample.

Some statistical analyses were conducted on the three employability requirements of qualification, work experience and practical hands-on skills to determine whether age and qualification had an influence on their rating of importance. An analysis of variance (ANOVA) test was conducted to determine if the means of the groups, in term of age and qualification, significantly differed from one another. The homogeneity of variances was tested prior to the ANOVA analysis to consider if the within-group variances were

constant. A p-value of 0.05 was assumed. Once the analysis was conducted, the hard skills were removed from the data set to analyse the remaining soft skill competencies and their associated behaviours.

a) Analysis of data reliability and normality

Once the hard skills had been removed from the data, the remainder of the data set was tested for reliability and data normality. Scale reliability is important to render study results reliable and valid. Similarly, the assumption of data normality needs to be confirmed to determine which statistical techniques should be used to analyse the data to eliminate statistical errors and render valid results (Ghasemi & Zahediasl, 2012). However, when sample sizes exceed 40, the violation of normality assumption is irrelevant and any statistical method, including parametric methods, can be used to conduct the analysis. Hence, the distribution of data becomes irrelevant with large numbers of responses (Elliott & Woodward, 2007). The researcher did, however, consider the data normality factor in conducting data analysis to determine the effect of outliers.

b) Analysis of the soft skill competencies and their associated behaviours

The main purpose of descriptive statistics is to describe the basic structure of the data collected in the study and the measures thereof (Sprinthall & Fisk, 1990).

Basic descriptive analyses were conducted to describe the mean, mode, median, minimum, maximum, outliers, item correlation, and skewness (see Appendix J). The median indicates the central value of the ranking range, while the mode indicates the most selected option.

The main purpose of the descriptive statistics was to enable the researcher to derive the soft skill behaviours to be included in the soft skill competency framework and answer the research question: Which soft skills behaviours would support intern employability in Eskom?

With data derived from ordinal scales, it is more appropriate to use the mode as indicator of majority opinion about the importance of skills in terms of employability. The behaviour mode was used to this effect. When the mode was equal to three, two, or one (not applicable, not important, or unsure) the behaviour was deleted from the database before further analysis. Only behaviours reporting a mode of four, five, and six (important, very important, and critical) were retained as an element of the framework.

Ranking is often used to determine the most to the least important criteria. In this study, the ranking of soft skill competencies importance could be valuable for developing strategies to determine the sequence of development programmes or mentorship focus areas for interns (Mardani et al., 2015). Accordingly, both soft skill behaviours and competencies were ranked for analysis.

The purpose of the inferential analysis is threefold. Firstly, it assists the researcher in reaching conclusions based on the research data. Secondly, it takes sample data to describe and makes inferences about the population under study. Thirdly, it allows the researcher to conclude whether the observed differences between groups are a true variance or one that occurred by chance (Creswell, 2015). The inferential technique of the t-test was used to determine if there was a difference between the views of the MPS and supervisors about the importance of a skill. The ANOVA test was used to determine the same criteria between the different age groups and qualification groups.

5.3.3.5 Analysis of the qualitative data

Two sets of qualitative data had to be analysed namely, the open ended question in the questionnaire and the Delphi.

a) Analysis of data collected in open ended question in questionnaire

Analysis of the qualitative data involved two sub-processes. The **first** was to determine whether any additional soft skill behaviours were identified in the open-ended qualitative question for inclusion in the quantitative soft skill behaviour data set for analysis. Once the soft skill behaviours had been coded, they were compared with the quantitative behaviours collected to determine new behavioural items. Duplicated behaviours were disregarded. No additional behaviours were identified for inclusion. Accordingly, no further analysis could be considered.

In the **second** sub-process, the data set was analysed for in-depth understanding of the views of the participants driving their importance ranking of the soft skill behaviours. By means of content analysis, the opinions on the behaviours were organised and interpreted in an attempt to make sense of the motivations behind the participants' selection of certain soft skill behaviours (Bengtsson, 2016).

Content analysis is defined as a research method for the subjective interpretation of the content of text data by means of the systematic classification process of coding and identifying themes or patterns (Dey, 2003). According to Downe-Wamboldt (1992:314), the aim of content analysis is to "provide knowledge and understanding of the phenomenon under study".

The central concept of content analyse revolves around uncovering themes in the data set collected to interpret and answer research questions by means of a logical and systematic process (Creswell, Hanson et al., 2007). It further allows researchers to expand on descriptive and comparative analysis by discovering the rationale of participant decision-making (Flick et al., 2004).

In content analysis, based on the data-collection method employed, the researcher has a choice in terms of the depth of analysis to be conducted. On a latent depth, the researcher deduces themes and codes by working diligently through data usually collected through interviews. On a manifest level, the

participants' words are used to remain true to their original meanings. While levels allow the researcher to present descriptive data on the categories (except ranking), the interpretations still need to be validated by means of literature consideration (Flick et al., 2004).

The content analysis involves the basic processes of examining data for the researcher to familiarise with it, identify coding units and labelling them, analyse the data by considering the coding units, and presenting the frequency of each code (Creswell, Hanson et al., 2007). While computer programs are available for content analysis, i.e. Atlas Ti, the qualitative responses were not deemed efficiently large to validate the use of software. Accordingly, the analysis process was done manually.

Codes represent the anchor concepts around which the data centre. In content analysis, three processes are used to code data, namely open coding, axial coding, and selective coding. With open coding, the focus is on words, phrases, or context of the remarks. The researcher marked and used verbatim the skill behaviour indicated in the opinion to code the remark. This ensured that the meaning of the content was not lost during the process to increase the credibility of the qualitative results (Patton, 2002).

Axial coding involved continuously reviewing and probing the initial codes identified for (i) continued relevancy and (ii) ensuring that the data are allocated correctly. With selective coding, the codes were scanned to identify any skill behaviours not related to the research objective or topic. In this process, the hard skills in the remarks were removed.

The next process was to label the opinions in each code according to whether they were positive, negative, or neutral. The data were sorted and prepared for descriptive analysis.

In this research, the primary purpose of the content analysis was to authenticate and enhance understanding of the quantitatively collected data. Hence, analysis of the data would include triangulation of the results during interpretation. Patterns and recurrent themes were determined and presented for a qualitative narrative during interpretation. Statistical analyses were also conducted to include the response rate and demographic information of the participants. Frequencies of the skills stated were determined.

The quality of the results was ensured throughout the whole process of the content analysis technique. A variety of methods can be employed to ensure rigour in qualitative studies. Data-collection processes should be suitable to allow and discover optimal sharing of experiences and opinions in the process. In addition, the analysis of the collected data should be thorough and systematic (Flick et al, 2004).

Credibility was entrenched by ensuring that the relevance of every piece of material collected in the open-ended question was considered before being coded or excluded. Credibility was supported further by means of the expert evaluation process followed during the Delphi consensus technique.

Dependability refers to the stability of data during the analysis process. To increase the dependability factor, the researcher used the words of the participants verbatim to describe their views of the soft skill behaviours to determine the reasons behind the quantitative importance ranking of the quantitative data set during triangulation. Keywords in the sentences were used to code and categorise the responses in soft skill behaviours and opinions within the specific behaviour.

The intention of the strategy was not to transfer the views of the participants to the general population, but to derive deeper understanding of the importance ranking of the selected skills. In line with the advice of Patton (2002), the researcher focussed on the depth of the data. Accordingly, transferability was not considered in the process.

Confirmability was established by duly considering all results before interpretation and drawing conclusions. In support, triangulation was used for comprising purposes. In the process, care was taken to discuss the concepts in a different perspective (Patton, 2002).

In the next section, the analysis conducted by means of the Delphi-approach is discussed.

b) Analysis Conducted of the Delphi-method data

As discussed, the purpose of the Delphi strategy was twofold. Firstly, it aimed to determine construct validity of the measurement scale. However, the main aim was to determine whether the developed soft skill competency framework was appropriate to enhance intern employability.

Data of the Delphi-process were not mixed with any other data, as their purpose was to validate the results derived in the mixed method data set. All statistical data analyses were conducted using the IBM Statistical Packages for Social Sciences (SPSS) Version 25 software

Unique to the qualitative Delphi technique is that it is suitable for a number of statistical analysis techniques to summarise and interpret the judgements for consensus (Schmidt, 1997). Data collected in the Delph processes were analysed for agreement between the expert panel members by means of the non-parametric statistic, Kendall's coefficient of concordance (Kendall's W). A non-parametric test is used for three or more responses (Howell, 2002). The W statistic ranges between 0 (no agreement) to 1 (complete agreement), where 0 represents perfect disagreement and 1 perfect agreement. Hence, the nearer the W coefficient is to 0, the least consensus exists. A coefficient range of 0.5 to 0.7 will indicate moderate agreement. A W value of 0.7 or higher indicates sufficient concordance, and no further ranking or further Delphi rounds are necessary. If the W value is less than 0.70, the ranking questionnaire must be re-sent to the panel members for re-evaluation (Schmidt, 1997).

Once consensus had been obtained, descriptive data analyses were conducted on the mean and mode of the opinions.

A test of significance (chi-square test statistic) was conducted to determine if the judgments of the consensus were homogeneous across the groups based on expert fields represented. Subsequently, the ANOVA and F-test statistics were determined to test the homogeneity between the groups.

Triangulation was conducted to compare the difference and agreements between the MPS, supervisors, and panel members. The next section described how the data results were integrated for interpretation and conclusions.

5.3.4 Integration and Interpretation of Results

Integration and interpretation is a sense-making process in which the research data results are considered carefully. Flowing from the data analysis, the integration and interpretation reflect the objectivity and credibility of the research process.

A popular technique advanced by O'Cathain et al. (2010) for the integration of results, is triangulation. O'Cathain, et al. (2010:4587) describes triangulation as a process of comparing data collected in parallel. They further hold the term 'integration' as one of "interaction and conversation between findings from quantitative and qualitative components" to produce a holistic view of the different aspects. According to these scholars, triangulation provides integration credibility, transparency and the development of critical thinking.

Generally, four types of triangulation are described, namely data triangulation (between different data sets), methodological triangulation (data collected with different methods), theoretical triangulation (compare different theoretical approaches), and investigator triangulation (involvement of diverse researchers in one study (Turner, Cardinal & Burton, 2017).

In this study, the researcher employed methodological (between methods) and data triangulation to leverage the strengths of each of the qualitative and quantitative methods to fully integrate the opinions regarding the soft skill behavioural requirements of Eskom. Quantitative and qualitative data were combined for the purpose of comparison of relationships, similarities, and differences.

Once the data was integrated, interpreted and compared, a preliminary framework was developed and submitted for evaluation to academic experts. Suggestions and enhancement proposals were incorporated in the final framework developments.

The elements of the research execution method, subsequent data analysis process, results interpretation followed and framework development process are presented in Figure 5.7.

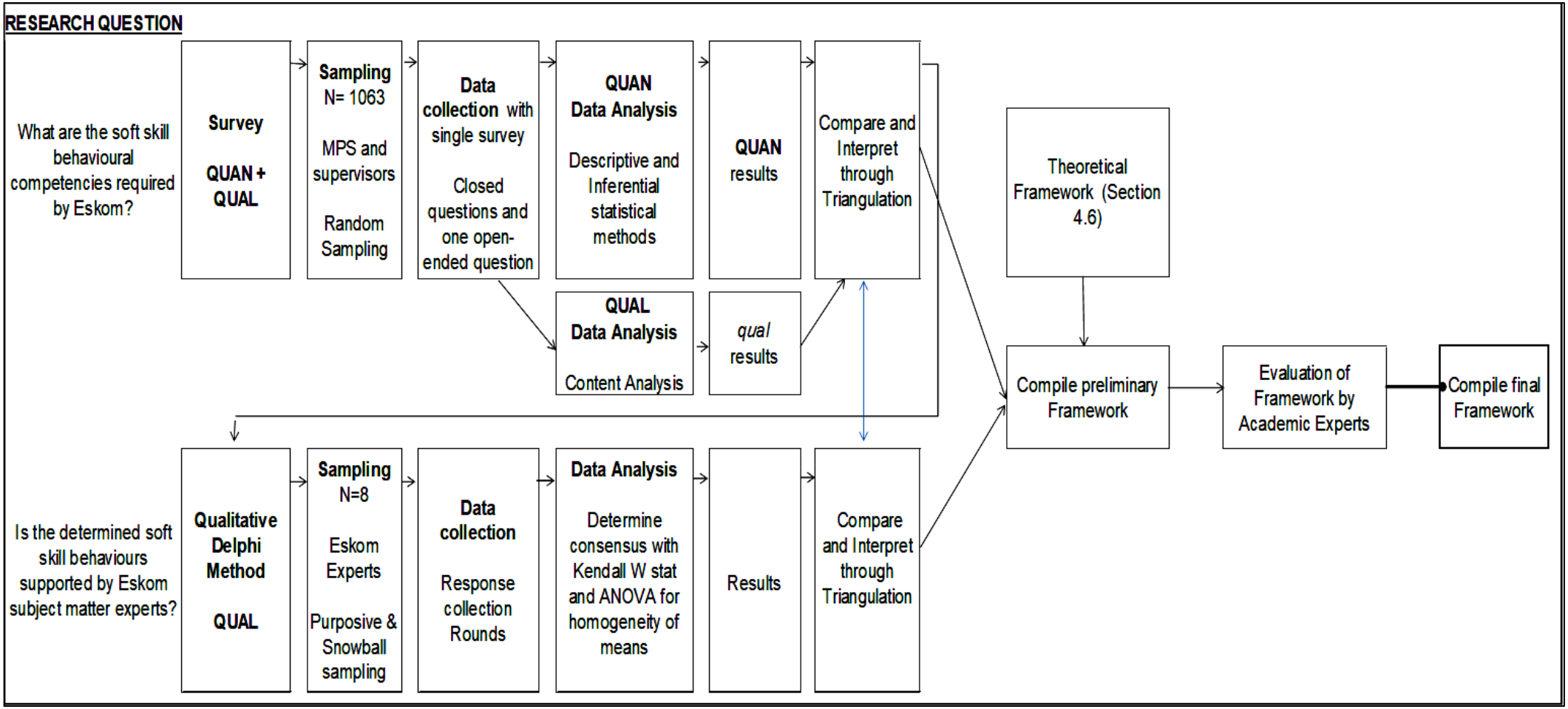


Figure 5.7: Empirical research design execution process

Source: Compiled by researcher.

5.3.5 Quality Assurance in Empirical Research

Ensuring data quality and ethical compliance in research studies are applicable to the entire continuum of the research process. Basic research designs focus predominantly on quality of research results, while applied research adds the requirement that research results should be transferable to the broader population and even other sectors (Baimyrzaeva, 2018). In applied research, a critical requirement for research quality is that different research strategies employed should be managed independently. McMillan and Schumacher (2006:28) warn, "overall credibility of a mixed-methods study depends on the independent quality of the quantitative and qualitative designs as well as the interplay between them". The view is confirmed by Creswell and Plano Clark (2007), who advise that, in mixed-method strategies, researchers should not mix the quantitative and qualitative analysis processes, but rather combine results at the interpretation stage to ensure quality. Hence, in mixed-method strategies, the term 'inference quality' combines the quality concepts of quantitative and qualitative methods (Tashakkori & Teddlie, 2003).

A research project that lacks quality requirements may present invalid inferences and even inappropriate conclusions. Therefore, the validity of a mixed-method study depends on the researcher's ability to manage quality actively during the research process to infer meaningful and true conclusions from the study results.

In the mixed-method design, different quality terminology is used in quantitative and qualitative research approaches. While the terminology is often regarded and described as related aspects, e.g. dependability and reliability, it refers to different sets of data assumptions and does not measure the same aspect (De Vos, 2005). Quality in the different approaches will be discussed separately, commencing with the quality requirements for quantitative research.

5.3.5.1. Quality requirements in quantitative research

In a quantitative research process, quality refers to the concepts of validity, internal and external validity, reliability, and objectivity – each measuring a different construct of the quantitative process as presented in Table 5.7.

Internal validity can be explained as "the accurate presentation of a particular context or event as described by the researcher" (Maree, 2007:297). A study is considered internally valid if the researcher can demonstrate that the items are valid to the desired outcome (Maree & Van der Westhuizen, 2009). In this study, internal validity would reflect whether the stated soft skill behaviours were relevant to the skill requirements of Eskom. The qualitative Delphi technique was selected to confirm the internal validity of the quantitative study results by means of a panel of Eskom experts.

On the other hand, external validity denotes the degree to which the collected data and research results can be generalised to the broader population and settings (Patton, 2002). The aim of this study was not to generalise the findings to other industries, nationalities, or contexts, but specifically to provide a solution to a problem in the Eskom context. However, the results might be generalisable to other employees.

Reliability refers to the quality of the questionnaire structure and items. Reliability of the data allows the researcher a platform to draw solid and valid conclusions to answer the research questions. Objectivity demands that researchers control for personal bias during the research process (Creswell and Plano Clark., 2007). Reliability is critical for objectivity of the study results. Many techniques are available to improve the reliability of data, for instance, by stating items clearly. The main method used is to increase the length of a measuring scale. The disadvantage of longer scales is that respondent fatigue might introduce errors by skipping items or guessing. In applied research, a reliability factor of at least 0.90 is required (Nunnally, 1978). Objectivity can be found in the quality of interpretation derived from the analysis and results (Drost, 2011). See Table 5.10 for a description of the quality factors.

Table 5.10: Clarification of Quality Terminology in the Quantitative Processes

Quantitative Process	
Quality Element	Measure
Validity	Quality of measurement scale, data, and results.
Internal validity	Accuracy of presentation of research context. Whether the findings reflect reality.
External validity	Degree to which data and results can be generalised to bigger/other populations or other environments
Reliability	Stability or consistency of data measured.
Objectivity	Control for bias or account for subjectivity during data collection and interpretation. Quality of and reasonableness of the interpretations derived from the collection and analysis processes

Source: Derived from the works of Creswell and Plano Clark (2007), Drost (2011), Pellissier (2008) and De Vos, (2005).

Quality of quantitative data is tested by means of statistical analysis, for example by the Cronbach Alpha, confidence level, and confirmatory factor analysis (CFA). The methods of statistical testing contribute to the objectivity required in quantitative studies.

In the next section, the quality requirements for qualitative research are considered.

5.3.5.2 Quality Requirements in Qualitative Research

Creswell and Plano Clark (2007) emphasise that while terminology between the quantitative and qualitative research processes may differ, all approaches focus primarily on assessing quality of survey data and the subsequent derived results.

Tashakkori and Teddlie (2003) describe data quality in terms of qualitative data collection as the norm against which the data can be considered trustworthy or dependable. The qualitative research process encompasses the concepts of rigour, credibility, transferability, dependability, or trustworthiness – again, each measuring a different construct of the qualitative process.

Rigour is similar to the validity concept of quantitative processes, as it applies to the due diligence afforded to the sub-processes of data sampling, data collection, and data analysing. When conducting qualitative research, rigour is of critical importance. A lack of rigour frequently results in biased, small-scale and subjective study results. If appropriately conducted, qualitative research renders subjective but rigorous results.

Linked with rigour, credibility is found in the methods used to obtain data and results. Another factor affecting the credibility of data is the credibility and ability of the researcher to retain objectivity during the process to limit bias interference.

Transferability is a complex concept in qualitative data results, as the process involves the unique views and experiences of different individuals. In the pragmatic approach, abduction techniques can render transferability of qualitative collected data.

Dependability is an evaluation of the quality of the combined processes of data collection, analysis, and theory. Dependability can be defined as a systematic process (Patton, 2002) and an attempt by the researcher “to account for changing conditions in the phenomenon chosen for study as well as changes in the design created by increasingly refined understanding of the setting” (De Vos, 2005:346). Should changes not be considered during data collection and processing, the dependability of the data results might be affected.

Testing for quality in qualitative processes can be subjective by nature. Therefore, researchers often seek confirmation for their qualitatively derived findings in other study outcomes to validate their research outcomes (Creswell, Hanson et al., 2007).

Morrow (2005) proposes that qualitative quality criteria should be considered against the communication during the process. Data- gathering instruments/meetings should be informative with regard to the objective of the study, the outcome expectations of the researcher, and the questions expected to be answered.

The qualitative quality criteria are presented in Table 5.11.

Table 5.11: Clarification of Quality Terminology in the Qualitative Research Processes

Qualitative Process	
Quality Element	Measure
Rigour	Quality of qualitative measurement scale, data, and results. Care and practice of data collection and analysis procedures
Credibility	Rigour of methods used and credibility of researcher.
Transferability	Degree to which data and results can be generalised to bigger/other populations.
Dependability/ Trustworthiness	Does the process account for changing conditions in the study subject or design as the research process unfolds?
Confirmability	Can another study confirm the study results?

Source: Derived from the works of Creswell, Hanson et al. (2007), and De Vos, (2005).

Triangulation of data results and methods with other similar studies allows researchers to compensate for any potential bias introduced during the qualitative process. An added advantage is that the technique also allows the researcher to develop a broader and deeper understanding of the results (Flick et al., 2004).

To support generalisations of qualitative results, quasi-statistics and the combination of quantitative and qualitative methods can be used (Seale, 1999).

Accordingly, the researcher needs to control the aspects that introduce quality issues into the research process, systematically. The next section will introduce the measurement effect of poor quality results and aspects that affect the quality of research results.

A fundamental requirement for the quality of qualitative processes is that the collected data provide in-depth understanding of the participants' experiences of the phenomenon being studied. Qualitative strategies are at higher risk for poor quality outcomes if the processes of data collection and analysis are not managed and controlled properly. Ill-managed processes leads to errors. Errors are often introduced in the research process, which results in poor research quality.

5.3.5.3 Errors that affect Data Quality

Measurement of quality indicates whether errors have been introduced into or during the research process to render questionable results. Measurement errors present either in the form of random or systemic errors. The works of Drost (2011) and Umbach (2005) reports on measurement errors as presented in the next sections.

5.3.5.3.1 Random errors

Random errors refer to inaccurate sampling, response errors and processing or reading of data. Irrespective of the research approach used to conduct the research, data attained from behavioural research studies are subjected to random errors of measurement, which can affect the reliability/dependability of the data or scale used.

Processing errors are usually introduced before data analysis through incorrect qualitative coding and not considering outliers. These types of errors can be eliminated easily by considering outliers and coding data properly.

The sampling process can render two types of errors, namely coverage and sampling errors. Coverage errors occur when the sample does not match the sample frame, resulting in an inappropriate sample size. Coverage errors also occur when individual members of the population are excluded through discriminative practices by not affording them the opportunity to participate in the sampling process. The method of collection and an appropriate sample size should be duly considered to avoid coverage errors.

Non-response errors refer to when respondents fail to respond to certain sections or items. Short questionnaires can prevent the errors proactively. On the other hand, while it is expected that lengthy questionnaires or data collection processes mitigate non-response errors, respondent fatigue can also introduce non-response errors.

Adjustment errors occur during attempts to reduce errors, for example, reduction of data and coding. Due consideration should be given to how to clean data and categorise qualitatively to prevent adjustment errors.

5.3.5.3.2 Systemic errors

Systemic errors occur when the measuring scale is incorrect, incorrectly answered by respondents, or researcher bias is introduced. Systemic errors due to inefficiencies of the measuring scale are the result of poorly formulated wording of items and construction of the scale. Such errors do not cancel out but contribute to the mean score of the subjects being studied. Systemic errors can cause the mean values to be too big or too small, which results in incorrect interpretation of the study results; therefore, it is a big

concern in terms of validity. The errors can be avoided by eliminating questionnaires with unacceptable high levels of missing data, consulting with subject specialists, or pre-testing the questionnaire.

Another factor affecting data quality is the lack of ability of participants to describe views or opinions in detail and logically or address the specific interest requirement of the researcher. Many of these risks are mitigated by collecting data through an open-ended question in a concurrent mixed- method process (Creswell & Plano Clark., 2007) and proper, systematic analysis to present the view of the respondents.

In direct contrast to quantitative research where objectivity is regarded as an important outcome, qualitative research by nature is embedded in subjectivity. While all research approaches are subjected to researcher bias errors, the structure of the qualitative approach where participant experiences are subjective and often influenced by group dynamics, demands that the researcher gives rigorous attention to control the self and process to limit bias errors (Flick et al, 2004).

The quality of research is predominantly affected by incorrect sampling, inappropriate data- collection methods, data manipulation, group dynamics, researcher bias, subjectivity of data, and questionable soundness of the results and conclusions. These effects can be mitigated by means of error- reducing measures, which will be discussed next.

5.3.5.3.3 Mitigation of measurement errors to ensure data quality

Errors can be eradicated or decreased by employing appropriate preventative measures (Watson, 2015). The various mitigating measures are summarised against the discussed aspects that produce measurement errors in Table 5.12. The various measurement techniques are added per quality requirement and aspect introducing errors.

Table 5.12: Factors that Affect Research Quality

Quality Element	Factors affecting	How measured	Mitigation measures
Validity/ Rigour (Scale)	Incorrect items that do not measure what should be measured. A measuring scale that does not measure the study construct. Insufficient criterion to compare a newly developed scale. Intervening events. Reliability. Systematic errors.	Construct validity is the extent to which a test measures a theoretical construct or attribute. Measure with validity coefficient or quasi-statistics	Use a mixed method to enhance data. Pre-test scale. Compare scale against available and tested scales. Mix quantitative and qualitative data only after analysis. Thus, do not mix before conclusions.
Internal Validity/ Credibility	The credibility of researcher. Low response rate. Pressured respondents. Method of data collection. Systematic errors. Guessing. Researcher bias.	Content validity: Assess by Cronbach's Alpha (α) Triangulation Delphi consensus seeking	Use both quantitative and qualitative items in scale. Maximise response rate. Triangulation with other scales, methods, and data. Use the Delphi technique with specialists. Ensure confidentiality and anonymity.
External Validity/ Transferability	Small samples. Little responses. Inappropriate settings, incorrect populations and samples	Relevance of generation or transferability	Comprehensive sampling. Good response rates. Relevant populations.
Reliability/ Dependability/ Trustworthy (Data)	Test length. Variability of scores. Guessing. Variation in the test. Participants' fatigue. Environmental factors. Multiple raters. Random errors.	Reliability coefficients: Measure degree of consistency in the measurement of test scores. Assess by split-half approach. Internal consistency – Assess by Cronbach's Alpha (α)	Mixed method Items/statements must be defined clearly. Multiple items to test the same construct. The more items, the smaller the error. Triangulation of data. Minimise errors.
Objectivity/ Confirmability	A single method of data collection. Bias and researcher credibility	Triangulation. Delphi consensus technique.	Use two different sets of data collection. Validation by specialists.

Source: Adapted from the works of Drost (2011), Nieuwenhuis (2007), and Patton (2002).

In the next section, it will be discussed how the requirements for 'harm not' were met.

5.3.6 Ethical Requirements in Empirical Research

A set of ethical principles guides researchers when planning, executing and reporting research. The primary objective of these principles is to protect study participants. The second objective is to guarantee

that research is conducted in a manner that safeguards the interests of individuals and society. The final objective is to scrutinise research activities and establish their ethical soundness, protection of confidentiality, the process of informed consent, and potential risk mitigation (De Vos & Strydom, 2011).`

5.3.6.1 Permission for study

Permission to conduct the study in Eskom was requested by presenting the study objective and valuable contribution to the relevant decision-makers in Eskom (Strydom, 2005). The initial permission (Appendix F) was replaced by a second permission letter (Appendix G) after the Eskom policies and procedures governing research had changed. A new approval process had to be followed to ensure proper governance would guide the research study.

The objective of the study was to develop a soft skill competency framework for interns employed by the Eskom internship programme. Hence, the researcher would make the research results and framework available to Eskom after completion of the study.

Two separate ethical clearances were obtained from the Ethics Committee of the University of the Free State. Ethical clearance for phase 1 of the empirical research, with reference number UFS-HSD2017/1360, was obtained and is attached to this document as Appendix H. The second application involved the second phase of the empirical study and was authorised by the Ethics Committee under the new clearance reference number UFS-HSD2019/0368/0506 (see Appendix I).

Once permission has been obtained from the approval bodies, it was necessary to consider how to ensure voluntary participation of the selected sample.

5.3.6.2 Voluntary participation

Two aspects of voluntary participation are essential. The first requirement is that research may not be conducted without the participant's informed consent – it is an absolute, inherent research requirement stipulated by the National Health Research Ethics Council (NHREC, 2011) in order to protect participants from exploitation. Informed consent is based on a person's absolute worth and ethically guided right to respect for personal autonomy (Nienaber, 2013). To support the requirement to be informed, the invitation to participate in the study included a detailed information document that stated the research purpose of the study in full and frank disclosure. Contact details of the researcher were also provided for respondents to engage for further clarification.

The second requirement for voluntary participation is that the participants must be afforded the choice of participation without negative consequences, should they decline to participate (Babble & Mouton, 2001). To ensure voluntary participation in the survey, the link to the online survey for the quantitative data collection was provided in the email invitation. Access to the survey was possible only from the

respondents' email accounts. Only respondents who wished to participate in the study selected the link to effect access to the survey. Once accessed, the respondent was awarded a second opportunity to state his/her willingness to participate in the study. If not willing, the survey allowed the respondent to exit the survey.

Respondents, who wished to withdraw from the process at any given point during the survey, could do so immediately. Further, to mitigate the frustration of such an extended survey, the programme was not set up to prevent respondents from skipping an item or leaving the process at any time. While this decision risked affecting the validity and reliability of the data collected and increasing system errors, the risk was mitigated by using the mode of each item primarily to determine the selection of the behaviour for the soft skill framework. Survey responses with missing responses above 10 per cent were deleted for data analysis.

Confidentiality of the participants had to be considered and ensured during the proses of data collection. This requirement is discussed in the next section.

5.3.6.3 Confidentiality

Confidentiality becomes relevant when responses can be linked to a specific participant, but the researcher committed not to make the respondent information public (Babble & Mouton, 2001). While internet-mediated research may support ethical conduct, it raises challenges concerning the confidentiality of information (British Psychological Society, 2013). The British Psychological Society (2013) proposes that consideration be given to the domain, confidentiality, copyright, and traceability of the research. As such, the confidentiality of respondents was protected by using the EVA survey software platform. While the researcher sent the invites by email, the respondents' email addresses were removed by the EVA survey system at completion of the online survey, and a numeric number was allocated to the respondent. The researcher had no knowledge of the identity of the survey respondents. The collected data were stored on a secured network and server environment with password-restricted access. To ensure the physical security of data and confidentiality thereof, the data can be accessed only by the researcher.

5.3.6.4 Anonymity

Confidentiality is closely related to anonymity (Orb, Eisenhauer & Wynaden, 2001). A concern of research participants is the anonymity of their participation. The literature describes a set of moral principles researchers need to consider and exercise during the planning, execution, and reporting of a research study to address the potential concerns of participants.

The anonymity of respondents was protected by using an online survey, completed optionally, voluntarily, and privately without interference. The data- collection software does not have the functionality to link the

response data to a specific respondent. Participant identification items were also not included in the demographic information on the survey.

5.3.6.5 Reputation and legal risks

One of the major concerns for organisations when considering participating in research studies is the risk of reputational damage. In spite of permission or voluntary participation, researchers should ensure that diligent attempts are made to ensure that the reputations of the organisation, respondents and participants are not embarrassed or affected negatively (Babbie, 2011).

To further ensure protection of the respondents' reputation, the data were collected by means of an electronic survey method that did not collect any personal or traceable information. No aspects or comments could be linked to any respondent. The names of the participating Delphi panel experts were replaced with a numbering system, and responses cannot be traced to any panel member.

Another risk arises from conflict of interests, issues of data ownership, and publication rights. All these aspects, as well as reputational risk, were addressed by means of a legal agreement between the researcher, the university, and Eskom (Uys, 2008). The requirement also subscribes to and supports the principle of no harm.

5.3.6.6 No harm principle

When considering the rights and interests of research participants, the Code of Research Ethics of the Human Sciences Research Council (HSRC, 1997) places a duty on researchers to take special care to protect respondents. Inherent to this requirement is the obligation to protect participants from harm. This harm is not limited to physical harm to participants but also emotional harm and discomfort of participants (Babble & Mouton, 2001; Strydom, 2005). The harm concept addresses the requirements for beneficence and justice. The obligation of beneficence demands from the researcher to maximise benefits for the participant or participating society while minimising the risk of any harm to participants. One method to maximise potential study benefits is by employing a sound experimental design supported by literature, a risk assessment, and subject to rigorous review (Adams, 2013). To confirm compliance with the no-harm principle, the study and measurement instrument were founded in scholarly literature and conducted by using well-established research design methods.

The length of the measuring scale indicated that some measure of inconvenience would be experienced. The respondents were allowed to complete the survey in their own time and at their leisure. Two weeks were allowed for survey completion. Participants who found the length of the survey too exhausting were allowed to leave the survey at any point.

Justice demands an equitable selection of participants, i.e. avoiding inclusion based on race or gender in non-specific studies. As described, the method used during the random sampling procedure ensured that individuals in the sample had the same random chance of being selected as potential respondents.

The principle of justice further demands that those who undertake the burdens of research must be likely to benefit from the research (Adams, 2013). It is assumed that the respondents at minimum benefitted through awareness created by the items relating to the employability-directed behaviour and competencies.

5.3.6.7 Relationship risk

Relationship risk in research relates to any relationships between the researcher and the respondents or participants and among the respondents/participants. The respondent sample was selected purposively within the MPS and supervisor bands. The selection was made based on Eskom's Microsoft Outlook address book. The link to the survey was sent to the sample for individual consideration of participation. Any responses could not be traced directly to a person. Accordingly, no risk of relationship influence existed.

Eskom experts were selected for the panel based on their functional position, qualifications, and experience to render validity to the process. Academic experts were recruited for the panel by the Business School of the University of the Free State. The chapter is summarised in the next section.

5.4 CONCLUSION

This chapter provided an overview of the research design and strategies employed to address the empirical research questions and give effect to the study objective. From the pragmatic paradigm, a concurrent transformative mixed-method strategy was selected to answer the question regarding which soft skills behaviours are required for intern employability in Eskom. During the concurrent transformative method, data were collected from two populations with a single questionnaire consisting of predominantly quantitative, closed questions and one qualitative, open-ended question from the selected samples of MPS and supervisors. The data sets were analysed separately and merged only for interpretation. The quantitatively collected data were analysed by means of descriptive and inferential statistics, while content analysis was used to analyse the qualitative data set.

A second qualitative method, the Delphi technique, was used to answer the question: Are the collected soft skills appropriate and valid for the soft skill requirements of Eskom?

Chapter 6 presents the central focus of the empirical research processes, the analysis of the results and the interpretations thereof. The interpretations and results provided the criteria the researcher required

to develop the soft skill competency framework to satisfy the primary research objective, which is presented in Chapter 7.

CHAPTER 6

DATA ANALYSIS AND INTERPRETATION

Chapter 5 explained the execution of the empirical research strategies. Chapter 6 builds on Chapter 5 in answering the Research Questions 5 and 6: *Which soft skill employability competencies does Eskom require?* and *Do Eskom subject matter experts support the determined soft skill competencies?* Answering the questions provided the contextual elements of the soft skill competency framework developed in Chapter 7.

6.1 INTRODUCTION

Analysis and interpretation of the researched data require the researcher to explain the procedures followed to analyse the data, explain the results in detail, and compare how the results relate to existing theory and studies. The researcher should illustrate the results and associated interpretations clearly to the intended audience (Creswell, 2009). Accordingly, the report presents the results in simple tabular and graphical formats to support the interpretation by the reader.

The chapter is designed to focus predominantly on the results and findings of the soft skill behaviours deemed important to take Eskom forward in the 4IR. Hence, the outcome of the chapter is to present the final soft skills and behaviours that will be incorporated in the proposed soft skill competency framework.

The results were evaluated against the relevant literature. The discussion in the chapter is presented in two parts. The first part presents the results and findings of the mixed-method process, and the second part presents the results and findings of the Delphi process.

The discussion of the mixed-method procedures followed commences with a consideration of the survey response rate and the demographic information of the population. Following, attention moves to report on the reliability and construct validity of the measuring scale in support of quality results and objectivity. Next, a short review of the hard skill data results is presented, followed by the evaluation and conclusion of the primary study aim of soft skills.

The second part turns to the content validity and degree of consensus by examining the results of the opinions of experts on the Eskom panel

All quantitative and qualitative analyses were conducted separately and were merged only during interpretation. The analysis and interpretation of the employability skills are presented systematically. Triangulation and interpretation of the quantitative and qualitative findings were conducted to present an integrated view and deeper understanding.

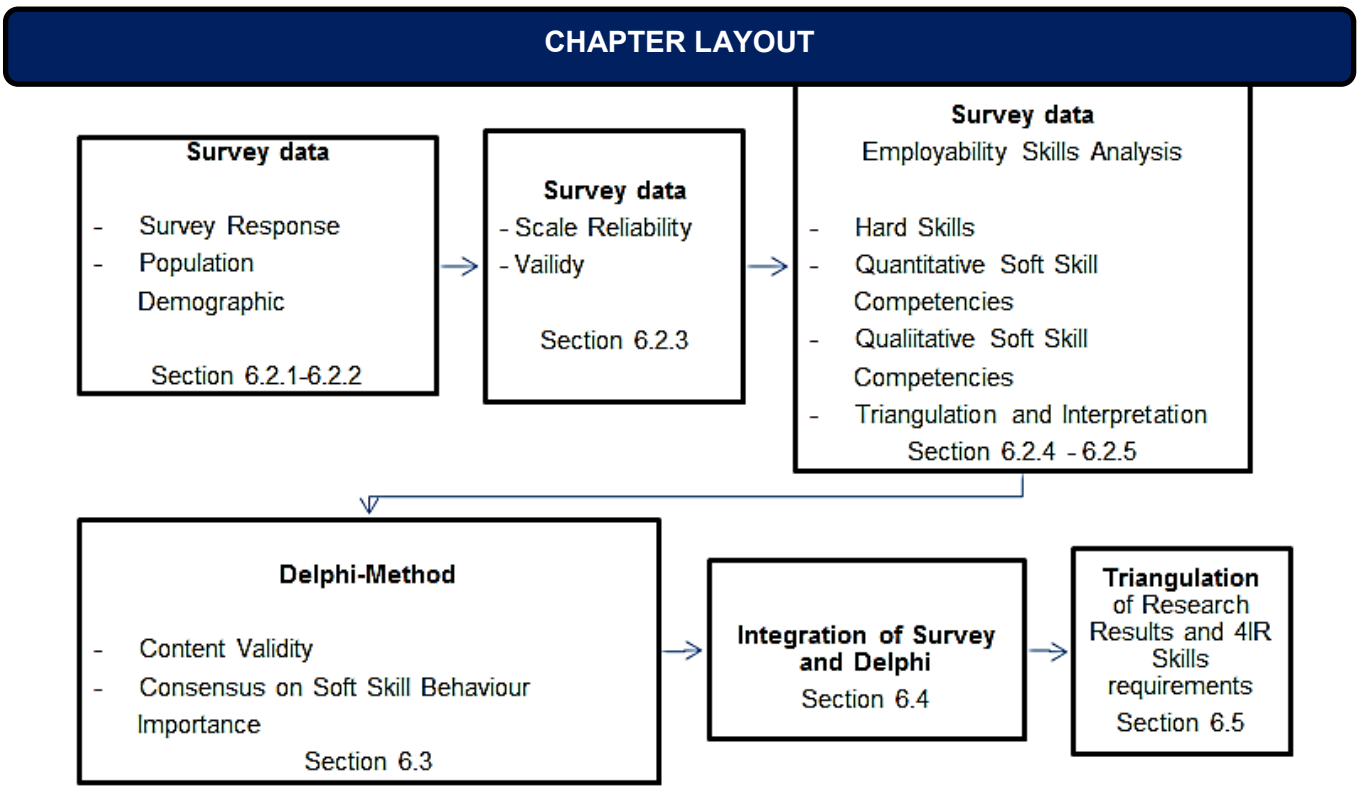


Figure 6.1: Chapter layout

Source: Compiled by the researcher.

The next section commences with the analysis of the information collected from the measurement scale. A confidence factor of 0.95 was used throughout all statistical analysis.

6.2 ANALYSIS OF SURVEY DATA

The section presents the response rate, population validity, and demographic information of the population. The section commences by introducing the response rate.

6.2.1 Survey Response Rate

Descriptive analysis was conducted to determine whether the responses returned met the requirements for survey validity and reliability in terms of response rate.

As indicated in Table 6.1, 304 respondents completed and submitted the survey. Two survey responses were discarded and accepted as non-responses (see section 5.3.3.2.1). The final data represent the ranked opinions collected from the 302 respondents who were represented by 235 MPS and 67 supervisors.

Table 6.1: Survey Response Rates per Respondent Type

Respondent type	Population	Sampled	Valid Responses	Valid Response rate
MPS	830	763	216	28 %
Supervisors	493	300	66	22 %
Did not indicate			20	-
Total	1 323	1063	302	28 %
Selected to complete qualitative open-ended question		302	96	30 %

Source: Researcher.

To comply with the requirements for scale reliability behaviours, a large number of items were included in the measuring scale items (255). The lengthy measurement instrument could have discouraged the participants to participate, and another consideration was that Eskom was experiencing challenging times as a going concern. Organisational instability and uncertainty affect staff morale and attitude through conscientiousness and agreeableness (OCB). Both conscientiousness and agreeableness play a role in the willingness of respondents to assist and participate in surveys (Rogelberg et al., 2003). In addition, as part of the Eskom financial turn-around strategy, it was considered to put the internship programme on hold. This consideration might have affected participation if the exercise was deemed fruitless.

The low response rate raises a concern as to the validity of the data collected. A minimum survey response rate in academic studies on behavioural sciences has been debated extensively. Earlier works indicate a minimum rate as 50 % (Babbie, 2006), while Nunnally (1978) argues that it should be 70 %. Another range postulated by Baruch (1999) for data collection from middle managers is 39 % +/- 13 %. However, recent works indicate a steadily decreasing rate in survey responses. Various strategies have been employed to address the reasons for poor responses to increase response rates – with few results (Fan & Yan, 2010). As early as 1996, Visser, Krosnick, Marquette and Curtin (1996), determined that response rates as low as 20 % produced more accurate results than studies with high response rates This view is supported by more recent work done by Morton, Bandara, Robinson, and Carr (2012), who argue that, while response rates are good information, they are not good representations of study validity, and a low response is not an automatic indicator of study validity. Baruch (1999) supports this view, stating that the Cronbach Alpha is a more appropriate measure to determine study validity. Accordingly, the reported response rate of the current study is deemed acceptable (Cronbach's alpha = 0.998).

6.2.2 Demographic Information

Demographics are characteristics of the sample selected from the study population. Investigation of the characteristics of respondents is vital, as it allows the researcher to make a better in-depth analysis of

the data. A second advantage is that such analysis assists in determining if any variances/agreements exist between group views (Harpe, 2015). The information indicates that the study was well represented across age, gender, qualification, location, and organisational role.

In terms of participation role, twenty-one of the respondents did not indicate their role allocation. The survey link was sent only to supervisors and MPS positions for participation. It can be concluded that the responses of the unidentified respondents are still valid for analysis. The majority of respondents (71 %) were MPS employees. This is a good indicator that the survey responses incorporated the views of both the operational and the strategical skills components. Sufficient support was provided by the supervisor sample in terms of intern development knowledge, curriculum, and practices.

Next, an investigation followed to determine if all of Eskom's business units and functional roles were represented in the survey results. The information indicates that all business units in Eskom, except customer services, were represented in the survey results. However, it might be that participants of this departmental output did participate, but did not indicate their departmental role. The majority of the respondents were based in the corporate offices with the least representation in Transmission.

The various Eskom functions were well represented, with more or less equal representation of operations and support functions. The project management function reported the highest individual survey participation. The 4IR-relevant hard skill functions of technology and IT functions needed for the megatrends of digital expansion (section 2.4.4) and technological expansion were also well represented at a combined 15 percent.

Interpreting results in a geographic space is helpful for understanding the spread of research opinions (Merow, Smith, & Silander Jr., 2013). The respondents' geographical spread indicates a sound national representation of the survey respondents. While the majority (52 %) were situated in Gauteng, the remaining respondents were well spread over the national region appropriate to their regional Eskom percentage. Western Cape responses were 7.7 percent, Northern Cape 3 percent, North-West 1.3 percent, Mpumalanga 17 percent, Limpopo 5 percent, KwaZulu-Natal 6 percent, Free State 4.3 percent, and Eastern Cape 3 percent. The response rate is then deemed an appropriate and sufficient view of Eskom in general.

For interest's sake, respondents were requested to indicate their gender as part of their survey responses. Males represented 216 (72 %) of the respondents, while female respondents constituted 85 (28 %). This is not a representation of the gender representation in Eskom, but merely reflects the gender of respondents who were willing to participate in the study.

The qualifications and ages of the respondents were of specific interest to the researcher and are discussed in more detail next.

6.2.2.1 Age of respondents

The majority of the respondents, 225 (75 %), were 41 years and older (see Figure 6.2). The remaining age distribution for participants between 26 and 30 years was 3 %, and for participants between 31 and 40 years 21 %. The age distribution provides confidence that the respondents had sufficient capability in terms of experience to add optimal value to the study in terms of appropriate skill behaviours.

The age distribution of both the quantitative and qualitative samples is represented in Figure 6.2.

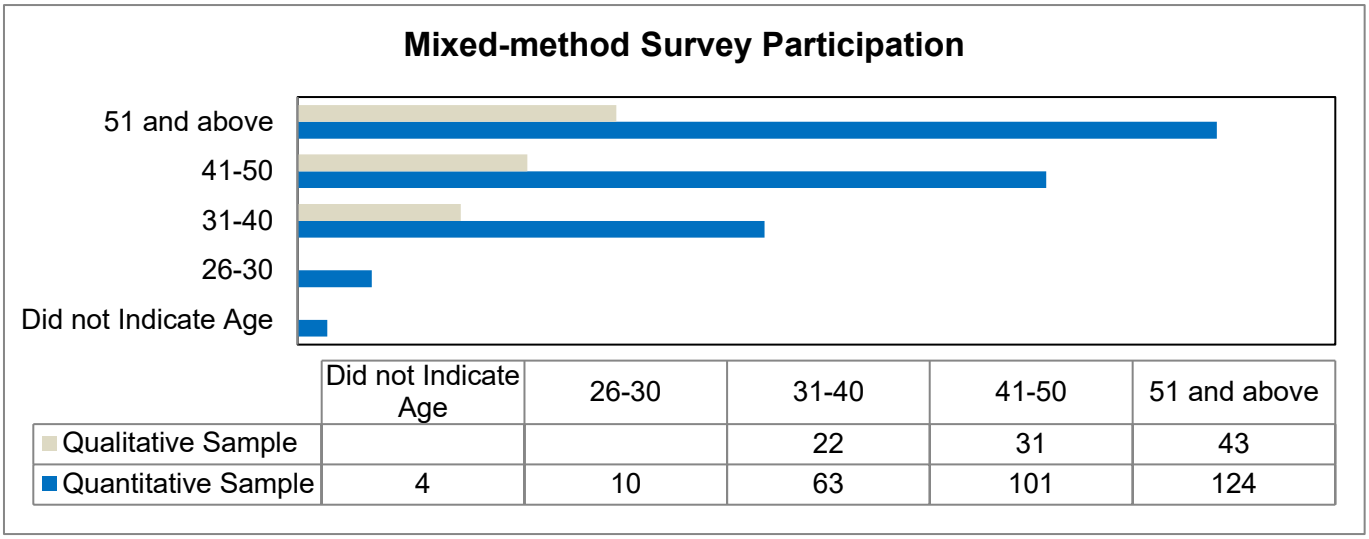


Figure 6.2: Age distribution of respondents

Respondents were requested to indicate their ages to gauge their receptiveness to change, their open-mindedness, and critical thinking (see section 2.4.5). The results are presented in Table 6.2.

Table 6.2: Influence of Age on Respondents' Change Receptiveness

	26-30	31-40	41-50	51 and above
Can manage change constructively	30 %	30 %	49 %	42 %
Can initiate changes to work or life	30 %	41 %	51 %	54 %
The ability to respond and integrate change with minimal resistance	40 %	56 %	45 %	42 %
Be able to respond constructively to change	50 %	41 %	51 %	42 %
Average of opinions per age:	38 %	42 %	49 %	45 %

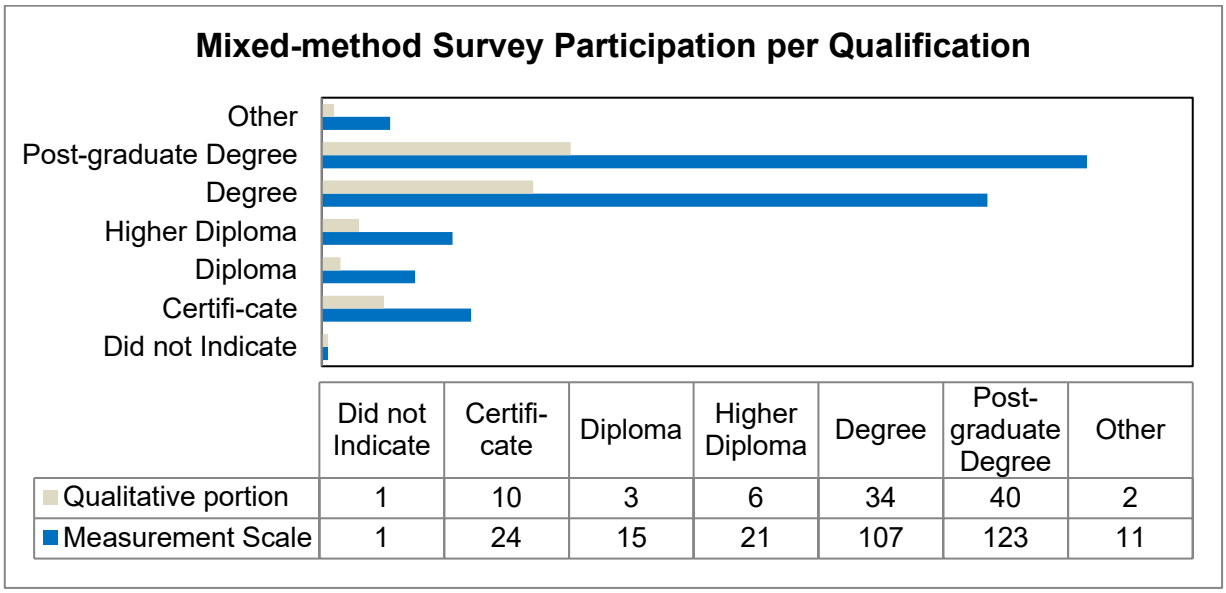
Source: Compiled by the researcher.

The majority of the respondents indicated that change capabilities are important, followed by the opinion of very important. Contradictory to scholarly works that indicate that older employees are more resistant to change than younger ones are, the results indicate that, on average, more of the older employees considered the capability of change important during the 4IR. The results indicate that the majority of the

respondents considered change abilities an important to very important skill concept in the workplace and approached the survey and consideration of the soft skills with open minds.

6.2.2.2 Qualifications of respondents

Post-secondary school qualifications provide employees with higher-order thinking skills and tools to evaluate the world through a more critical lens (Hasslöf et al., 2016). This would generate an appreciation for how skills, competency, and performance integrate with work outcomes. Demographic results indicate that twelve respondents did not indicate their qualifications. The majority of the respondents (95 %) had tertiary qualifications, with 230 of them reporting degree qualifications (MPS = 180; Supervisors = 38; Role not indicated = 12), and 123 indicated postgraduate degrees (MPS = 99; Supervisors = 18; Role not indicated = 6). The high percentage provides comfort that the study sample understood the importance of knowledge, skills, and continuous self-development in the workplace. In addition, the tertiary education subjects respondents to a broader and more holistic view of the subject under consideration. Figure 6.3 presents the qualification distribution of both the quantitative and qualitative samples.



	Did not Indicate	Certifi-cate	Diploma	Higher Diploma	Degree	Post-graduate Degree	Other
Qualitative portion	1	10	3	6	34	40	2
Measurement Scale	1	24	15	21	107	123	11

Figure 6.3: Qualification distribution of respondents

Considering the combination of age and qualification, it is indicative that the respondents in the age group 41-50 had the highest contribution of degree (47 %) and postgraduate degree (43 %) knowledge. The age group was followed by the age range 31-40, who presented with 33 % degree and 44 % post-graduation degree knowledge. The respondents show a decline in terms of age for both the diploma and higher diploma qualification requirements, which are indicative of the raised qualification requirements in Eskom (see Table 6.3).

Table 6.3: Respondent Age and Qualification

	AGE				
Qualification	26-30	31-40	41-50	51 and above	Total
Certificate	3	8	2	11	24
Diploma	1	2	4	8	15
Higher diploma	-	-	3	18	21
Degree	2	21	47	37	107
Postgraduate degree	3	28	45	44	120
Other	1	4		6	11
Total	10	63	101	124	298

Source: Compiled by the researcher.

6.2.3 Reliability and Validity of Measurement Scale

In this section, the characteristics of the measurement scale and data distribution are discussed. It commences with measuring errors.

6.2.3.1 Management of missing data

Measurement errors are derived predominantly from missing data in responses. These errors are a critical constraint from a statistical perspective, as they affect the validity and reliability of study results. Substituting missing values with the mean of the item responses presents another method to deal with missing data. This method increases the sample data considered during statistical analyses and decreases the need for missing data assumptions (Gudivada et al., 2017).

Evaluation reports that 439 (0.6 %) of the total data points reported missing data. Descriptive analysis was used to determine the mean of the soft skill behaviour. All missing data were replaced with the mean to minimise measurement error.

6.2.3.2 Test for normality of data distribution

The normal distribution describes how the values of an item are distributed. It is deemed an important assumption in research results, as it indicates how closely the respondents agreed on the importance of the specific soft skill behaviour; – thus, how closely their opinions were centred on the item mean. If the distribution is not normal, it indicates that the data contain problematic outliers that could prejudice the results (D'Agostino, 2017). Outliers can have a distortive effect on the mean and standard deviation of the data set (Grubbs, 1969).

The Shapiro-Wilk Test W statistic for the item data reports $0.7 < W < 0.90$ with a p-value < 0.004 and a p-value ($p < 0.002$) smaller than the alpha of 0.50. These statistics indicate that the data were not distributed normally. The notion is also supported by the skewness and kurtosis of the distributions.

Outliers were investigated and found to be true distribution response rates of the large sample of respondents and not the results of errors. Accordingly, the outliers were not removed, and the data distribution was treated as asymmetric data.

On face value, the results indicated 107 behaviours with no outliers, while 124 showed outliers. The items with outliers were restricted to the not applicable and not important ratings. Only four of the skills behaviours regarded as critical indicated outliers. Despite the outliers, the median and mode of the identified behaviours remained in the important to the critical range.

Using the Grubbs test to determine the effect of the outliers on the data validity, the G-value (4.023) < G statistics (4.820) indicate that the outliers do not affect the mean and SD at an alpha of 0.05.

Even while the Shapiro-Wilk Test indicated that the data are not distributed normally, D'Agostino (2017) argues that various tests are robust to the assumption of normality, which does not require the use of only a nonparametric test. The researcher used a nonparametric test where applicable but also used robust tests, i.e. ANOVA and CFA, in analyses of the data.

6.2.3.3 Respondent fatigue

One of the major concerns of scales with a high quantity of items is that respondent fatigue might affect response rate, data validity, and reliability (Hess, Hensher & Daly, 2012).

Similar to the testing of scale stability, the test-retest method was used to determine whether respondent fatigue would influence internal validity and reliability. Except for the behaviour *Developing creative, innovative solutions*, which decreased from a ranking of very important to important, all other item rankings remained the same. Interrogating the mean of the behaviour and its corresponding behaviour, *Come up with innovative ideas* indicated that the mean value decreased from 4.72 to 4.49 between the two items. This indicates that the mean value remained in the range of important. The Cronbach Alpha value indicates that, while the correlation between the item rankings decreased over the range of scale items, it still reported a strong correlation. The standard deviations of the test-retest were below 1, indicating that the opinions of the respondents remained consistent and centred near the test mean despite the interval between the test-retest items. Notably, despite the long scale, responded fatigue did not affect the validity and reliability of the data set. A possible reason for this phenomenon is offered by Porter, Whitcomb and Weitzer (2004), who argue that some respondents will complete surveys irrespective of fatigue. This is due to the capability to persevere as postulated by Bezuidenhout (2011), who relates perseverance to self-efficacy (see section 3.3.2.4), and Luthans et al. (2007), who includes the concept as an element of PsyCap (see section 3.3.3).

Another reason offered by Khan, Khan, Khan, Nawaz and Yar (2013) is that older workers are often more committed than younger ones are. Further Investigation of the missing data against the age of the

respondents showed that the results contradicted Khan et al.'s (2013) argument. In the 26 to 30 age group, 70 % of the younger respondents fully completed the questionnaire. On average, in all other age groups, only 60 % fully completed the questionnaire. The age group above 51 reported the highest non-completed questionnaires at 42 %. This results support a recent study by Ajayi (2017), who also found that younger employees showed more organisational commitment than older employees did. Considering the contribution of the respondent groups to the missing data, it is indicative that the MPS employees reported the highest non-completion of questionnaires, at 44 %. Another consideration, given that soft skill-driven employability is a relatively new study field, is that the younger age group might be more familiar with the concept and understand the importance of soft skills in organisational outcomes.

The high inter-rater correlation and SE < 1 indicate that the generalisation of the research results to the total population can be accepted (see Table 6.4). Referring back to the scholarly views on perseverance being an element of self-efficacy and PsyCap as discussed earlier, it is indicative that the perseverance factor of the supervisors and 26 to 30 age groups is higher than those of the MPS and other age groups are.

Table 6.4: Respondent Fatigue Correlation Results

Number	Item statement	Mode	Range between items	Cronbach Alpha
66	Considers people's concerns and adjusts own behaviour in a helpful manner	Important	5	0.832
72	Considers people's concerns and adjusts own behaviour in a helpful manner	Important		
88	Understand the role of conflict in a group in reaching solutions	Important	99	0.734
187	Understand the role of conflict in a group in reaching solutions	Important		
82	Can motivate others toward action.	Important	157	0.769
239	The ability to motivate others	Important		
34	Developing creative, innovative solutions	Very Important	201	0.695
236	Come up with innovative ideas	Important		

Source: Compiled by the researcher.

In the next section, the results of the determination of scale reliability are reported.

6.2.3.4 Scale reliability

The popular Cronbach Alpha coefficient was used to determine the internal consistency reliability of the scale. In general, a correlation coefficient of below 0.3 reports a weak to no correlation, 0.3 to 0.5 a

moderate correlation, and above 0.5 a strong correlation. In terms of data reliability, an Alpha coefficient of .70 and above is considered as desirable (Drost, 2011). However, Cronbach (2004) warns that the coefficient should not be used in isolation, but the analysis should include evaluating the standard error (SE) of measurement, as it is an excellent statistical indicator of sampling bias. A small SE confirms construct reliability and measures the precision with which a sample is a good representation of the population for which it acts (Heale and Twycross, 2015).

The Cronbach alpha coefficient (α) for the entire scale (255 items) was .998, while the coefficient for only the soft skills subscale (234 items) was .993. All item alphas were $0.992 < \alpha < 0.995$. These alfa figures signify that both the scale and the soft skill subscale items have high internal consistency and that errors will not offset the measures.

Relatively small values of between 0.025 and 0.080 were obtained for the SE (s) of the majority scale items, while a value of 0.051 was obtained for the overall sample SE reports. With a confidence of 95 per cent, the sample mean was relatively close to the true mean of the population being researched. This confirms (i) the stability and the reliability of the measurement scale and (ii) that the selected sample was a good representation of the population.

6.2.3.5 Scale Validity

Construct validity was established by conducting a confirmatory factor analysis (CFA) using the IBM Statistical Packages for Social Sciences (SPSS) Version 25 software. CFA was used to test how well the selected soft skill behaviours fit the soft skill competencies determined in section 5.3.4.1.1 (see Table 5.6). The goodness of fit is an indication of construct validity. The survey responses of 302 met the minimum requirement of 200 survey responses to confirm factorisation validity. Another condition for a valid CFA is that one-factor models (a soft skill competency) require a minimum of three items (behaviours) linked to it. The Goodness of fit parameters presented in Table 5.9 was used to analyse the CFA results (Appendix K).

Kaiser (1970) argues for a Kaiser-Meyer-Olkin (KMO) test to be conducted prior to factorising. The test determines whether the soft skill behavioural items are related and suitable for factor analysis. In general, a KMO statistic of less than 0.6 indicates that the data are not suitable for factor analysis, while values between 0.8 and 1 indicate high data adequacy (Howard, 2016). The KMO test obtained a superb value of 0.920, which indicated that the data set was optimally adequate for factor analysis. However, one behaviour reported did not satisfy the KMO requirement of ($0.5 < KMO < 1$).

The KMO statistic of the behaviour ‘negotiating responsively’ obtained a value of 0.368. Further interrogation indicated the behaviour also had a weak CF loading coefficient of -0.080, which was less than the minimum requirement for data reliability of 0.400 (see Table 5.9). Together with its high communality 98 % and a low contribution percentage (communality), it indicated that the behaviour was

overrepresented in the category of team participation and was accordingly deleted for the framework purposes.

Applying factor analysis to the data set for the pre-determined categories (see Table 5.6) reported that twelve of the 16 categories were single, primary categories. Subcategories were reported for four categories and reported in brackets of self-management (5), governance compliance (2), team participation (4) and performance drive (4).

The KMO statistic indicated that all soft skill behaviours were suitable for factor analysis. Once confirmed, attention was given to the category of eco care soft skill competency, which did not comply with the requirement to have at least three behaviours per soft skill category. The skill was presented as eco-care and safety and health awareness that represented the new developed concept of zero harm capital (see Zero harm capital model, Figure 4.2). Combining the soft skill behaviours of eco-care and safety and health awareness increased the value contribution of the behaviours (component score coefficient z-score) to the single category of zero harm. The lower the component score coefficient, the higher the value contribution. A comparison of the old and new component score coefficients is presented in Table 6.5.

Table 6.5: CFA Analysis Results for the Soft Skill Competency Category of Zero Harm

Behaviours	KMO	Communalities	CF Loading Coefficient	Initial Comp Score Coef	New Comp Score Coef
Eco care					**Zero Harm Skill**
Comply with all environmental policies and legislation	0.5	68 %	0.827	0.604	0.229
Anticipating problems before they happen.	0.5	68 %	0.827	0.604	0.187
Health and Safety Conscious					
Take care of your personal safety	0.801	67 %	0.817	0.325	0.232
Drive safety consciousness in workplace.	0.740	73 %	0.855	0.340	0.251
Take care of own health	0.857	43 %	0.653	0.260	0.189
Take care of others' safety	0.747	69 %	0.829	0.330	0.246

Source: Compiled by the researcher.

The analysis of any potential redundant behaviour (high component score coefficient) was conducted. The higher the score, the lower the value contribution of the behaviour would be to the soft skill competency. Such behaviours should be excluded from the framework. The soft skill behaviours obtained component score alphas of < 0.500 with the z-score values between 0.072 and 0. 0.340. All behaviours contributed highly to the soft skill competencies categories to which they were allocated.

Analysis of the reliability of the data to the construct intent is determined by analysing the CF Loading Coefficient. The rule of thumb is that factor loadings < 0.40 are weak and factor loadings ≥ .60 are strong. The behaviours obtained factor loadings of 0.484 < z-score < 0.860, indicating that all behaviours contributed significant value to the soft skill competency categories to which they were allocated. Considering the factor loadings of the subcategories to their primary categories indicated that all subcategories loaded at significant value contribution with 0.0998 < z-score < 1.000. It can be shown that the soft skill competencies as well as their individual behaviours yielded satisfactory model fit.

The final step would be to conduct a reliability analysis to confirm the reliability of the competencies and associated behaviours to be incorporated into the framework. Accordingly, this section evaluates the internal consistency of the final 15 categories by means of reliability correlation analysis. This is an important step to determine possible generalisation of the primary skills internal to Eskom. The Cronbach Alpha correlation test was used in the analysis, and the results are presented in Table 6.6.

Six of the final selected competencies obtained a high Cronbach alpha of 0.8 < alpha < 0.9, which indicates a strong general internal consistency between the soft skill competencies and their associated behaviours. The remaining nine competencies obtained excellent internal consistency with a Cronbach alpha coefficient of > 0.9. Team participation obtained the highest alpha coefficient of 0.978, with resilience the lowest at 0.809. Combined, all competencies obtained an internal consistency alpha coefficient of 0.993. The high value indicates significant internal agreement between the soft skills competencies, their sub category competencies, and associated behaviours support construct validity of both the measuring instrument and the statistical validity required for the proposed soft skill competency framework, which will be discussed in Chapter 7. The reliability alphas of the final 15 soft skill competency categories are presented in Table 6.6.

Table 6.6: Reliability Indicator of Final Framework Categories

Competency	Cronbach Alpha
Team participation	0.978
Performance drive	0.968
Self-management	0.959
Analytical	0.938
Problem solving	0.923
Self-development	0.921
KnowYBusiness	0.920
Continuous improvement	0.911
Decision-making	0.908
Communication	0.899
Innovation	0.872
Adaptability	0.858
Governance, compliance and ethics	0.854
Zero harm	0.832
Resilience	0.809

Source: Compiled by the researcher.

All 15 soft skill categories and their behaviours present goodness of fit in support of the proposed framework. In the next section, the analysis of the quantitatively collected data during the mixed-method process is presented.

6.2.4 Analysis of Hard Skills

The study objective does not support the topic of hard skills. However, hard skills form an integral part of employability. Hence, and in the interest of providing a balanced view, some analysis was conducted on the hard skills for discussion and triangulation. The quantitative and qualitative analyses were conducted separately and integrated only during triangulation. The analysis commenced with the quantitative view, followed by the qualitative analysis.

6.2.4.1 Quantitatively collected hard skills

Eight percent of the scale items related to technical requirements. In this case, the term *hard skills* is used as an umbrella term to describe the requirements of experience, qualifications, and technical skills. General views concerning the importance of the identified hard skills are presented. The quantitative results were obtained by means of the computer software Statistical Packages for the Social Sciences (SPSS) Version 25.

Turning to the opinions of the respondents on the importance of various hard skills, the skills were ranked according to their mean. Surprisingly, common sense was ranked the most important hard skill, followed by formal post-school education and computer literacy. Experience was deemed the least important hard skill to ensure intern employability (see Table 6.7).

Table 6.7: Descriptive Statistics for Hard Skills

Hard Skill	Rank	Mean	SE	Median	Mode	SD	S.Var	Outlier
Common Sense	1	4.90	0.051	5	Important	0.895	0.801	8
Formal education (after school)	2	4.78	0.050	5	Very Important	0.871	0.758	1
Computer literacy	3	4.73	0.052	5	Important	0.911	0.830	1
Writing skills	4	4.70	0.047	5	Important	0.817	0.668	2
How to be practical/hands-on	5	4.65	0.051	5	Important	0.881	0.775	4
Use technology effectively to communicate with others	6	4.63	0.048	5	Very Important	0.831	0.691	2
Confident to work with numerical data	7	4.55	0.051	4	Important	0.879	0.773	7
Operating, compute and using basic systems and applications as necessary	8	4.47	0.048	4	Important	0.842	0.708	1
Sound financial awareness	9	4.47	0.058	4	Important	1.000	1.001	2
Technology knowledge	10	4.44	0.056	4	Important	0.975	0.951	2
Telephone etiquette	11	4.43	0.057	4	Important	0.992	0.984	5
Uses mathematical skills and strategies	12	4.39	0.058	4	Important	1.004	1.008	1
Driver's licence	13	4.37	0.071	4	Important	1.236	1.529	4
Uses scientific skills and strategies	14	4.33	0.059	4	Important	1.025	1.050	1
Use of graphics and tables to present numerical data effectively	15	4.29	0.057	4	Important	0.995	0.990	6
Competent use of Microsoft Word	16	4.28	0.063	4	Important	1.092	1.193	6
Competent use of MS Outlook	17	4.26	0.062	4	Important	1.073	1.151	3
Competent use of Microsoft Excel	18	4.21	0.065	4	Important	1.135	1.288	-
Having a range of basic IT skills	19	4.18	0.065	4	Important	1.121	1.257	8
Competent use of Microsoft Power Point software	20	4.07	0.064	4	Important	1.116	1.245	4
Should have some work experience	21	3.62	0.079	4	Important	1.376	1.894	5

Source: Compiled by the researcher.

Evaluation of the hard skills in terms of mean indicated that consensus of the respondents settled around hard skills as being important for employability. In terms of mode, the two hard skill items of *qualification* and *effective use of technology to communicate with others* were deemed very important for employability by the respondents. All other hard skills, namely use of software, confident to work with numerical data, having a range of basic IT skills, a driver's licence, having telephone etiquette, computer literacy, the ability to use scientific skills, mathematical skills and strategies, writing skills, technology knowledge, and financial awareness were rated as important for employability.

6.2.4.1.1 Considering the importance of qualification, work experience, and practical skills

Commencing with the importance of qualification**,** 3.2 % of the respondents regarded qualification as not relevant or were unsure as to the importance thereof. In contrast, 22.5 % regarded qualifications as a critical requirement. The remainder of the respondents viewed the importance of qualifications almost equally between important and very important. Thus, qualifications were regarded as a value contributor to the employability of interns.

Another point of interest is whether the respondents considered work experience as a requirement for intern employability. When considering the mean results of each hard skill, respondents were unsure how to rate *Should have some work experience* (mean = 3.62, and missing data = 5). This indicates that the respondents were divided in considering experience as a requirement. Thirty-two percent of the respondents agreed that it was not a requirement, 10 % were unsure, and the remaining 58 % regarded experience as a requirement for employability. On the other hand, while the complexity of the organisational environment might require some experience, it was also acknowledged that graduate interns would be inexperienced.

Attention was also given to the necessity to apply learning practically and be hands-on for employability consideration. The results indicate that 39 % of respondents regarded practical skills as important, while 38 % of the respondents were of the opinion that such skills were very important for employability. Again, the majority of the respondents regarded the skills in terms of these three hard skill factors as only important (see Table 6.8).

Table 6.8: Opinions of Respondents on Qualification, being Practical/Hands-on, and Work Experience

Ranking	Qualification	%	Work experience	%	Practical/ Hands-on Skills	%
Not applicable	-		6	2	-	
Not important	5	1.7	89	30	8	2.7
Unsure	5	1.7	29	9.8	7	2.3
Important	110	36.4	94	31.6	117	39.3
Very important	114	37.7	47	15.8	114	38.3
Critical	68	22.5	32	10.8	52	17.4
Total	302	100	297	100	298	100

Source: Compiled by the researcher.

A brief analysis was conducted of the role of age (section 6.2.4.1.2) and qualification (section 6.2.4.1.3) in the decision-making process of the employability criteria. An ANOVA analysis was conducted to determine whether age and qualification played a significant role in the decision-making process of the survey participants.

6.2.4.1.2 Effect of age on the respondents' opinion ratings

The standard deviation (SD) for these items indicates that the variance from the mean of the respondents' ratings was low. According to the results, there was no deviation for the homogeneity assumption of $p > 0.05$ for the factors of work experience, formal education after school, and hands-on practical experience. In terms of the homogeneity test, it can be concluded that the frequency distributions are identical between all age categories and that respondents did not differ in their views of the importance of the skills.

Accordingly, an ANOVA test was conducted to determine the equality of means in these employability factors. The results indicate that age had a significant effect on the decision of respondents whether work experience (F-stat 0.572; p-value 0.634) and being practical/hands-on (F-stat 0.555; p-value 0.645) were employability requirements. In contradiction, no evidence could be found that age affected the decision of respondents on formal education (F-stat 0.782; p-value 0.505). The results support the general view in Eskom that formal education is an important and necessary requirement for employability.

6.2.4.1.3 Effect of qualification on the respondents' opinion ratings

A similar analysis was conducted to determine if qualification affected the rating means of the three aspects under discussion, namely formal qualification, being practical/hands-on, and work experience in employability decisions. The standard deviation (SD) for these items indicates that the variance from the mean of the respondents' ratings was low. There was no deviation for the homogeneity assumption of $p > 0.05$ for the factors of work experience, formal education after school, and hands-on practical experience. In terms of the homogeneity test, it can be concluded that the frequency distributions were identical for all groups of qualifications. Accordingly, an ANOVA test was conducted to determine the equality of means in these employability factors.

The results indicate that qualification had a significant effect on the decision of respondents whether education (F-stat 1.582; p-value 0.179) and being practical/hands-on (F-stat 0.900; p-value 0.464) were employability requirements. No evidence could be found that qualification affected the decision of respondents regarding work experience requirements (F-stat 3.308; p-value 0.011). This indicates that qualification significantly affected the decision whether formal education and being practical/hands-on were employability requirements.

6.2.4.2 Qualitatively collected hard skills

The qualitative data were collected by means of an open-ended question during the quantitative data-collection process. The qualitative results are presented in the voices of the participants, with 4 % of the respondents selecting to contribute by completing the open-ended question. Eight MPS and five supervisors expanded their quantitative selections with qualitative remarks. In turn, the older participants (aged 41 and older) represented the majority view. The participants of the age group 26-30 did not offer any opinions to consider (see Table 6.9). This might be due to their relative short period of employment, which limits experience on the specific skills. Ten of the 13 participants reported degree qualifications, and 6 had postgraduate degrees. This gives confidence that the participants had more holistic knowledge to add value to the process.

Table 6.9: Response Rate and Demographics of Participants: Hard Skill Contribution

Qualification and Age	26-30	31-40	41-50	51 and above	Total	Response Rate
Certificate		1			1	
Diploma					-	
Higher diploma				1	1	
Degree			2	2	4	
Postgraduate degree			3	3	6	
Other		1			1	
Total	0	2	5	6	13	4 %
Respondents invited to render views	10	63	101	124	298	

Source: Compiled by the researcher.

The 14 hard skills raised during the qualitative data collection were categorised in the themes derived from the wording stated in the skills Basic Hand Tools Skills, Common Sense, Computer skills, Finances, Project Management, Information Management, Experience, and Qualifications, Technology and Basic Hand tool skills were raised as new skills not addressed in the quantitative questionnaire. The results and interpretation are presented in terms of the skill categories allocated to the qualitative opinions.

a) Experience

The participants perceived work experience as a very important value contributor to Eskom employability. The participants argued that practical exposure is critical for interns, as it allows them to link academic qualifications positively to work subjects (U131, M156). One participant (M78) warns, "*skills [of interns] are not knowledge, so to have a skill you need have done the task many times to acquire the skill".* Similarly, the participant flags Eskom *"to remember that to gain a skill, interns need experience on the task, and this takes time".*

The findings indicate consensus in views about the importance of experience when graduates are considered for employability. The views emphasise that experimental learning is a fundamental requirement for the development of employability capability and competency (see section 3.5.2).

b) Qualifications

Three participants raised opinions about the importance of qualifications for employability. The participants viewed qualifications as a critical requirement but believed that qualifications should be appropriate to output (S62; U131). One participant (M171) highlighted that skills and qualifications should be appropriate for supporting business performance. While a sense of frustration was highlighted in terms of unsuitably placed employees in the workplace, qualifications were viewed as important for employability.

c) Financial skills

Two participants believed that financial management was a very important skill requirement for intern employability. They propose that interns should understand decision consequences for long-term goals as well as how to prioritise costing under various circumstances. It is evident from the remarks that 'working smartly with money' was the core message conveyed by the participants. The opinions stated could be linked to the current financial crises experienced by Eskom.

d) Computer skills

Computer literacy and software skills were addressed by three participants. Their perceptions were that the skills were critical in employability determination. Software skills were also highlighted as important skills for interns. In line with scholarly opinions (see section 3.5.2), one manager (M186) highlighted that computer literacy can be self-taught if the intern has an attitude of curiosity. The participants agreed that computer literacy and the use of Microsoft software were critical for employability consideration.

e) Project management

Two participants believed that the planning and management of activities with project management skills would enhance intern employability.

f) Common sense, technology use, hand tools use and Eskom employability

The skills of common sense, technology use, and hand tools use were raised as single aspects by three participants.

The skill of common sense is often included as a soft skill in employability literature. This might be due to the concept not being quantifiable – as are soft skill behaviours. In line with scholarly views that common sense is more of an approach than a skill, the researcher included the ability of common sense as a hard

skill and did not evaluate it as a soft skill (see section 3.3.1). The participants also raised the importance of psychological capital in taking responsibility for own actions and output.

One supervisor felt strongly that basic training in hand tools should be incorporated in the internship programme.

g) Technology

Surprisingly, only one respondent raised the importance of technology use. As one of the top ten skills and the only hard skill on the 4IR critical skill requirements, more focus should be afforded to technology (see section 2.4.6).

By ranking the participants' views in terms of frequency and their ranking of the skills, qualification was rated as the most important value contributor to intern employability, followed by experience. Financial skills are rated as more important than computer skills. The poor financial status of Eskom clearly had an effect on the perceptions of participants. The views of the respondents per theme are summarised in Table 6.10.

Table 6.10: Qualitatively derived Hard Skill Behaviours of Eskom Employability

Theme	Frequency	Rank	Hard Skill Requirements
Qualifications	4	1	Relevant
Experience	4	2	Practical experience in work application
Financial skills	3	3	Planning and management Responsible spending
Computer skills	3	4	Literacy and software
Information management	3	5	Finding relevant information Management of information
Project management	2	6	Manage activities with project management methodology
Common sense	1	7	Common sense in work application
Technology	1	8	Importance of
Basic hand tools	1	9	Training in use of

Source: Compiled by the researcher.

6.2.4.3 Triangulation of Hard Skill Behaviours

The majority of hard skill opinions raised by participants related to qualifications, experience, and financial awareness. The opinions were considered in relation to the respondents' views for greater in-depth understanding.

6.2.4.3.1 Opinions regarding Qualifications

The majority of the respondents believed that post-school qualifications are a very important employability requirement. Two participants rated qualifications as a critical requirement. A supervisor (age 41-50) believed that qualifications should be appropriate to output and indicated a sense of frustration in terms of what was regarded as unsuitably placed employees in the workplace. Another participant (manager, age 51 and above) indicated that there were not sufficient technical skills and qualifications to support organisational performance. The qualification requirements, with reference to the decrease in requirement for diploma and higher diploma qualifications, have been addressed and are shown in Table 6.9. However, there is often a misconception of managers that appropriate skills are not available. With the embargo on appointments, managers could reach beyond the silo mentality in the business and enter into collaborative secondment agreements with other departments/business units.

6.2.4.3.2 Opinions regarding experience

Fifty-seven percent of the respondents believed that some work experience is required to be deemed employable. On the other hand, 47 % deemed it unnecessary, as practical exposure in the workplace would generate the skills needed for employability. Experience also requires repetitive completion of a task, and experience gained over time indicates that the duration of internship might be too short to generate the experience required. The views emphasise that experimental learning is a fundamental requirement for developing employability capability and competency (see section 3.5.2). The general opinion is also that focus should be on experience rather than academic performance when recruiting interns for employability.

6.2.4.3.3 Opinions regarding sound financial awareness

Sound financial awareness was considered by 90 % of the respondents as required skills for employability. Respect for Eskom's assets was highlighted as one way for interns to ensure cost savings. Good planning and consideration of financial consequences in decision-making were also mentioned as ways in which interns could be made aware of cost management.

6.2.5 Analysis of Soft Skill Behaviours

Because the objective of the study was to compile a soft skill competency framework, the results of this section will answer the research question: Which soft skill behavioural competencies does Eskom require? The section considers the results of the quantitative and qualitative analyses separately. Triangulation was conducted during interpretation to assist with a holistic picture of the soft skill behaviours that would indicate employability in Eskom.

6.2.5.1 Quantitatively collected soft skills

The questionnaire sought views of the respondents with regard to the soft skill behaviours that would enhance the employability of interns in Eskom. The modes of the 229 soft skills behaviours and soft skills indicated that the respondents believed all the behaviours should be included in the proposed framework (with 3.71 < mean < 5.38). The average mean of *Manage other's emotions* indicated uncertainty as to the inclusion of the behaviour into the framework. However, investigating the mode of the behaviour indicated that the respondents did consider the behaviour as important. Accordingly, the behaviour was retained for framework purposes.

6.2.5.1.1 Overall opinion on soft skill behaviours

The soft skills categories reported a mean range of 4.48 < mean < 4.98, indicating that the respondents rated all soft skills as important for the organisation.

The overall opinions were presented in their skill categories in terms of the behavioural modes of critical, very important, and important. Expressing the opinions of respondents on soft skill behaviours in terms of mode, gave the researcher an overview as to the importance priority linked to the appropriate soft skill behaviour. This is particularly of value in determining the sequence of development initiatives in an intern's development plan. Accordingly, all soft skill behaviours were allocated in terms of their modes as important, very important, or critical for Eskom. The majority of the behaviours were identified as important (56 %), while 39 % were considered as very important. The remaining 5 % represented critical behaviours that were related directly to the soft skills of zero harm, performance drive, and governance as presented in Table 6.11.

Table 6.11: Mode Statistics of Soft Skill Behaviours

Rating	Frequency	Soft Skill Behaviours	Linked Soft Skills
Important	128	See Appendix J	
Very Important	89	See Appendix J	
Critical	12	Drug free, Take care of your personal safety, Raises compliance, ethical or other issues to protect the Organisation's reputation and obligations, Personal integrity, Uphold the ethics and values of the company and workplace, Meet deadlines, Comply with policies, directives and procedures, Comply with all Environmental policies and legislation, Knows and respects the Organisations' Code of Conduct and values, Honesty in actions, Drive safety consciousness in workplace, Take care of others' safety	Zero Harm Zero Harm Corporate Governance Corporate Governance Corporate Governance Performance Drive Corporate Governance Zero Harm Corporate Governance Corporate Governance Corporate Governance Zero Harm Zero Harm

Source: Compiled by the researcher.

In the next section, the opinions on the ten highest-ranked behaviours are evaluated.

6.2.5.1.2 Opinions on the ten most valuable employability behaviours

The top ten ranked skill behaviours are: Take care of your personal safety, being Drug-free, Meet deadlines, Raises compliance, ethical or other issues to protect reputation and obligations of the organisation, Personal integrity, Honesty in actions, Uphold the ethics and values of the company and workplace, Plan and manage time, Demonstrate a positive attitude, and Comply with policies, directives and procedures.

The mean of the top 10 ranked behaviours ranked in excess of five, indicating that the behaviours were regarded as very important to critical. Notably, the behaviour *Take care of your personal safety* was rated as the most important skill behaviour.

Supported by the skewness values of the top ten ranked skills, the SD values indicated a low variability, with only one behaviour, namely *Drug-free*, reporting values above 1. The relatively high alpha (alpha > 0.671) indicates agreement among the respondents on the ranking (see Table 6.12).

Table 6.12: The Top 10 Ranked Soft Skill Behaviours

Top 10 ranked Behaviours	Soft skill	Rank	Mean	Median	Mode	SD	SE	Alpha	Outliers
Take care of your personal safety	Zero Harm	1	5.38	6	6	0.775	0.045	0.746	2
Drug free	Zero Harm	2	5.37	6	6	1.002	0.058	0.671	2
Meet deadlines	Performance	3	5.28	5	6	0.742	0.043	0.787	None
Raises compliance, ethical or other issues to protect the Organisations' reputation and obligations.	Governance	4	5.27	5	6	0.821	0.047	0.780	2
Personal integrity	Governance	5	5.23	5	6	0.825	0.047	0.782	2
Honesty in actions	Governance	6	5.19	5	6	0.814	0.047	0.813	None
Uphold the ethics and values of the company and workplace.	Governance	7	5.18	5	6	0.848	0.049	0.786	None
Plan and manage time	Performance	8	5.14	5	5	0.713	0.041	0.811	None
Demonstrate a positive attitude	Self-Management	9	5.13	5	5	0.731	0.042	0.813	2
Comply with policies, directives and procedures	Governance	10	5.13	5	6	0.882	0.051	0.799	None

Source: Compiled by the researcher.

When comparing the 12 critical ranked behaviours in terms of mode to the top ten ranked behaviours in terms of mean, four of the critical ranked skills were not reflected in the top ten ranked behaviours, namely

Comply with all environmental policies and legislation, Know and respects the code of conduct and values of the organisation, Drive safety consciousness in workplace, and Take care of others' safety.

In terms of the mean, the following two behaviours were not deemed critical, but were ranked under the top 10 rated behaviours: – Plan and manage time, and Demonstrate a positive attitude.

Eight of the 12 (67 %) behaviours identified as critical were also rated among the top 10 most important skills. The opinions of the respondents show a relatively high consistency when considering the importance of soft skill behaviours.

Table 6.13: Critical Soft Skill Behaviours versus the Top Ten Rated Soft Skill Behaviours

Behaviours Identified as Critical	Top Ten Rated Behaviours
Drug-free	Take care of your personal safety
Take care of your personal safety	Drug-free
Raises compliance, ethical or other issues to protect the reputation and obligations of the organisation	Meet deadlines
Personal integrity	Raises compliance, ethical or other issues to protect the reputation and obligations of the organisation
Uphold the ethics and values of the company and workplace	Personal integrity
Meet deadlines	Honesty in actions
Comply with policies, directives and procedures	Uphold the ethics and values of the company and workplace
Comply with all environmental policies and legislation	Plan and manage time
Knows and respects the code of conduct and values of the organisation	Demonstrate a positive attitude
Honesty in actions	Comply with policies, directives and procedures
Drive safety consciousness in the workplace	
Take care of others' safety	

Source: Compiled by the researcher.

In the next section, the ten lowest ranked behaviours in terms of the mean are considered.

6.2.5.1.3 Opinions on the ten employability behaviours ranked least valuable

The ten behaviours rated lowest relate to identity capital (three behaviours), social intelligence (three behaviours), and emotional intelligence (four behaviours). Interestingly, the soft skill behaviours guiding the ten soft skills behaviours ranked lowest related predominantly to the human interaction skills of emotional and social intelligence (see 3.3.4). For the behaviours rated lowest a mean of 4.25 < mean < 3.71 was obtained. Nine of the behaviours were rated as important. The least important of the skill behaviours in terms of means was selected as *Manage others' emotions*. The value of the mean indicates that the respondents were unsure as to the importance of the behaviour. However, the mode of the behaviour indicates the behaviour as important and should be included for evaluation of the soft skill

framework. The contribution of these behaviours is discussed in more detail during the analysis of the categories and subcategories.

The SD values of the ten lowest-ranked skills indicated a low variability with seven behaviours reporting values above 1 for the ten lowest-ranked skills. Even while the range of opinions was scattered across the spectrum, the respondents agreed on the ranking (alpha > 0.850). Table 6.14 presents the ten lowest-ranked soft skill behaviours and their statistical results.

Table 6.14: The Ten Lowest-ranked Soft Skill Behaviours

Ten Lowest-ranked Behaviours	Soft skill	Rank	Mean	Median	Mode	SD	SE	Alpha	Outliers
Can initiate changes to work or life	Adaptability	221	4.25	4	4	0.90	0.052	0.860	1
Make a favourable first impression	Self-management	222	4.24	4	4	1.06	0.061	0.883	1
Team negotiation skills	Team participation	223	4.21	4	4	1.04	0.060	0.861	1
Ability to read body language and emotions of others and direct own behaviour appropriately	Team participation/ Emotional intelligence	224	4.17	4	4	0.97	0.056	0.860	1
Deal constructively with organisational or team politics	Team participation	225	4.15	4	4	1.09	0.063	0.863	1
Be socially responsible and contribute to community	Self-management	226	4.14	4	4	1.09	0.063	0.886	1
Empathising	Team participation/ Emotional intelligence	227	4.09	4	4	1.00	0.057	0.850	1
Team facilitation skills	Team participation	228	4.04	4	4	1.15	0.066	0.884	1
Adapts arguments to others' needs/interests.	Team participation/ Emotional intelligence	229	4.00	4	4	1.14	0.065	0.888	1
Manage others' emotions	Team participation/ Emotional intelligence	230	3.71	4	4	1.21	0.070	0.910	None

Source: Compiled by the researcher.

To interrogate the opinions further, the frequency of the opinions was linked to their predetermined categories, subcategories and associated employability capital (see 4.4). In the next sections, the results of the soft skills linked to their respective categories of employability capital will be discussed.

6.2.5.1.4 Opinions on skills related to identity capital capability behaviours

a) Innovation behaviours

Opinions on innovation behaviours ranged from not important to critical with the majority consensus settling on very important (mean = 4.61; mode = 5).

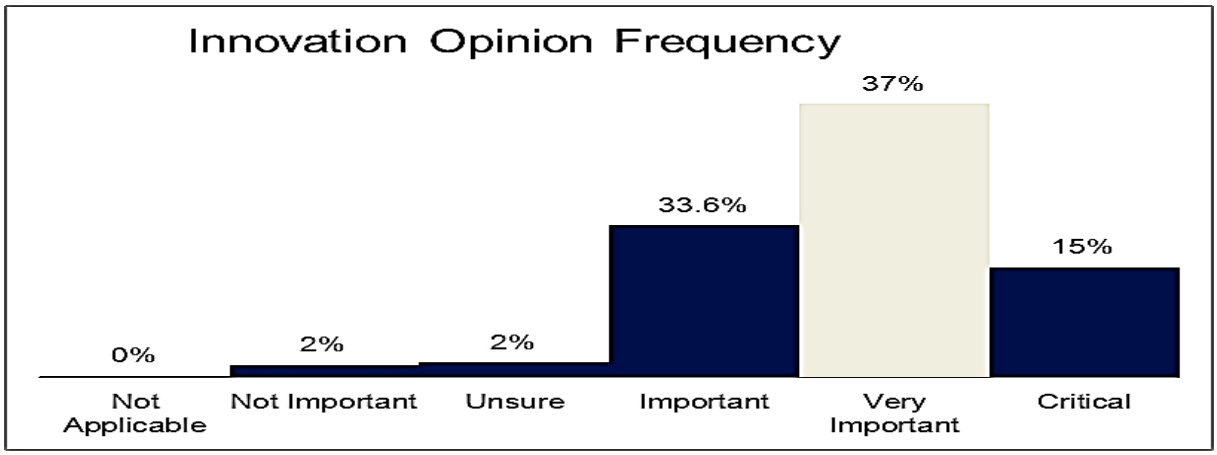


Figure 6.4: Opinions on innovation behaviours

Innovation is one of the skills, if not the most critical one, to take an organisation forward during the 4IR. As an outcome of entrepreneurial literacy, innovation is held as the core driver of economic growth and competitive advantage in organisations (see section 3.3.2.8). While innovation is not a direct requirement of interns during internship, the capability renders an open-mindedness often linked to problem-solving. Accordingly, the majority rating of the respondents is deemed appropriate.

b) Governance behaviours

Governance behaviours are represented by the two subcategories of Ethical conduct and Compliance with rules. Compliance with rules represented 60 % of the overall category. The majority behaviours of both subcategories were reported as critical requirements for employability.

Opinions on ethical conduct ranged from not important to critical, with the majority consensus settling on critical (mean = 5.06; mode = 6). Opinions on Compliance with rules ranged from not important to critical with the majority consensus settling on very important (mean = 4.85; mode = 5).

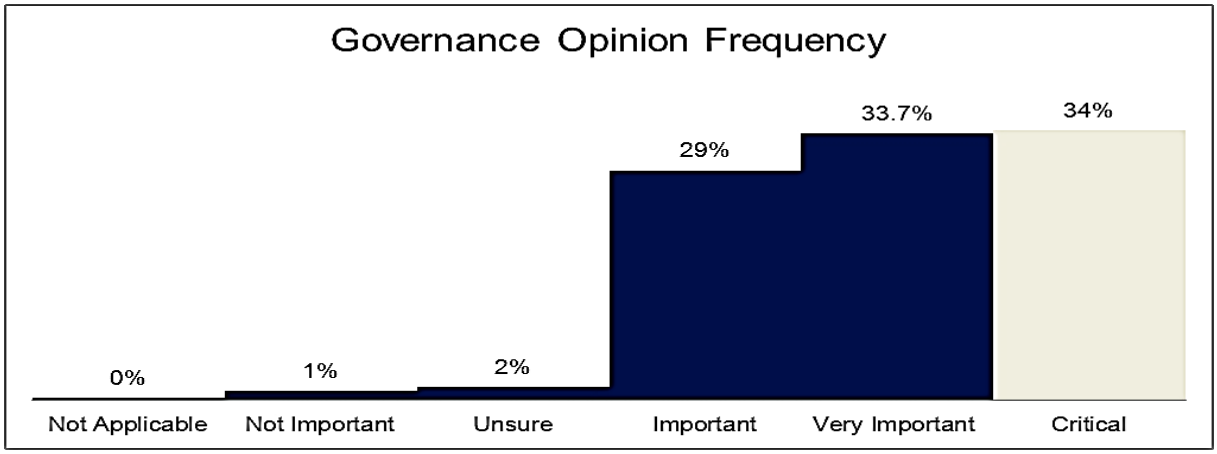


Figure 6.5: Opinions on governance behaviours

The failure of governance in Eskom has been criticised widely. The claim can be made that the results correlated directly with the state capture experienced by Eskom in recent years and the company's drive for ethical clean-up in the organisation. Even while this might be a valid assumption, executives rated integrity as the top employability skill required in the work environment (see Table 4.1). Governance involves the behavioural outcomes of identity capital, more specifically, self-efficacy and emotional literacy (sections 3.3.2.4 and 3.3.2.6). It can be expected that Identity capital will play a dominant role in shaping the future of Eskom during the 4IR. However, it remains a concern of the researcher that the 4IR scholars did not include this critically considered soft skill in their top ten 4IR required soft skills.

c) Performance drive behaviours

Opinions on performance behaviours ranged from not important to critical, with majority consensus settling on very important (mean = 4.71; mode = 5). The respondents showed near equal disagreement on the ranking of performance as an important or very important skill.

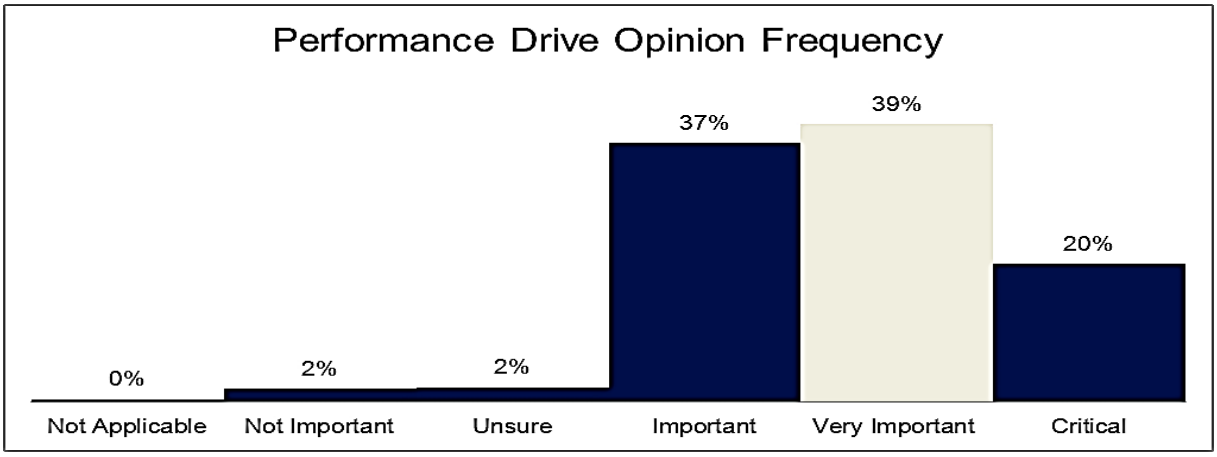


Figure 6.6: Opinions on performance drive behaviours

Interrogating the sub-skill behaviours of Apply self, Commitment, Customer Care, and Planning, the results show that both the soft skills Commitment and Planning ranked as very important, while Apply self and Customer Care were rated only as important. The overall rating is in line with the general view, that performance will steer organisational survival.

Performance is predominantly a behavioural outcome of identity capital, more specifically, self-efficacy and emotionally literacy (sections 3.3.2.4 and 3.3.2.6). Thus, it can be expected that Identity capital will play a dominant role in shaping the performance future of Eskom during the 4IR. There is also a direct relationship between PsyCap and the identity capital elements of commitment and performance (section 3.3.3) PsyCap makes a significant contribution to the excellence of organisational performance. Strengthening PsyCap can assist management in optimising the commitment element of performance. In addition, social capital supports the output of excellent customer care (section 3.3.4). Customer care can provide organisations with a competitive advantage during the 4IR (section 4.2) and accordingly is marked appropriately for development focus.

A notable observation was that the behaviour *Meet deadlines* was regarded as a critical soft skill behaviour. Meeting deadlines is related directly to self-efficacy and organisational progress (see 3.3.2.4). The critical importance linked to this skill emphasises the important role that leaders play in the development of interns and employees. In turn, the factors driving performance through self-efficacy lead to the basics of employees' human emotions, confidence, and feelings about their own ability (see 3.3.4). Leaders will have to make a concerted and conscious effort to build and support the confidence of interns during internship programmes.

Customer service, Planning, Commitment, and Apply self has one thing in common – increased revenue. Collectively, the skills can render a solid foundation for a competitive advantage for the organisation. Though performance traditionally has been linked to the execution of technical knowledge and skills, the findings indicate the comprehensive soft skill behaviours involved in the new world of work. While knowledge and some technical abilities still play a role, the softer elements of behaviour and attitude, as indicated in the secondary soft skills of Commitment and Apply self, drive the successful execution of workplace performance. Similar to employability, the face of performance in the workplace certainly has changed.

d) KnowYBusiness behaviours

Opinions on KnowYBusiness behaviours ranged from not important to critical with majority consensus settling on important (mean = 4.58; mode = 4). The majority of respondents see KnowYBusiness as important.

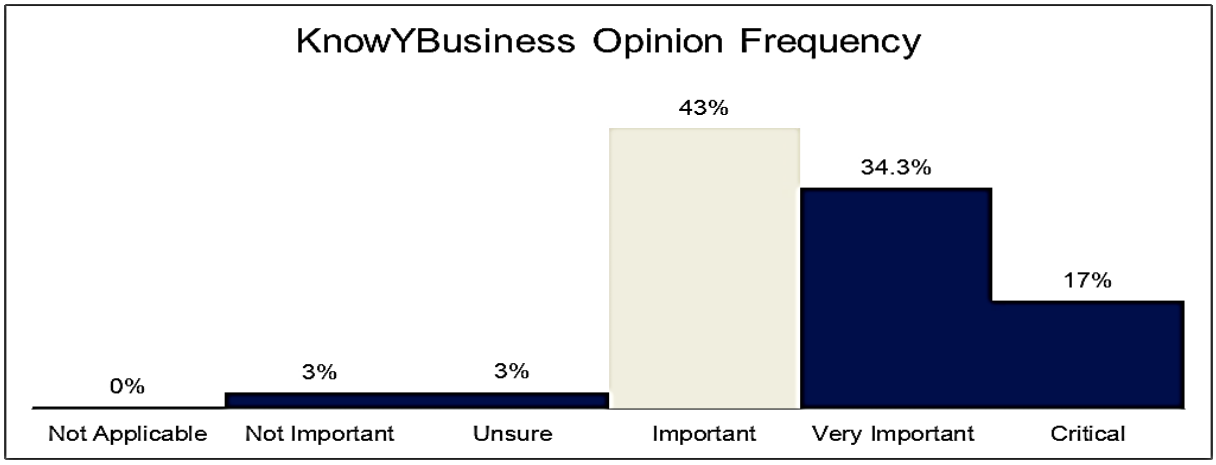


Figure 6.7: Opinions on KnowYBusiness behaviours

During the 4IR knowledge will drive markets and competitive advantages. It is no surprise that the respondents rated Understanding the needs of internal and external customers as very important. These needs will derive a competitive advantage for organisations during the 4IR and will be the primary indicator of organisational success. Linked to this soft skill is also the requirement of continuous learning emphasised by employers as an employability requirement.

e) Problem-solving behaviours

Opinions on *Problem-solving behaviours* ranged from not important to critical, with the majority consensus settling on important (mean = 4.63; mode = 4). The majority of respondents regarded Problem-solving as an important skill.

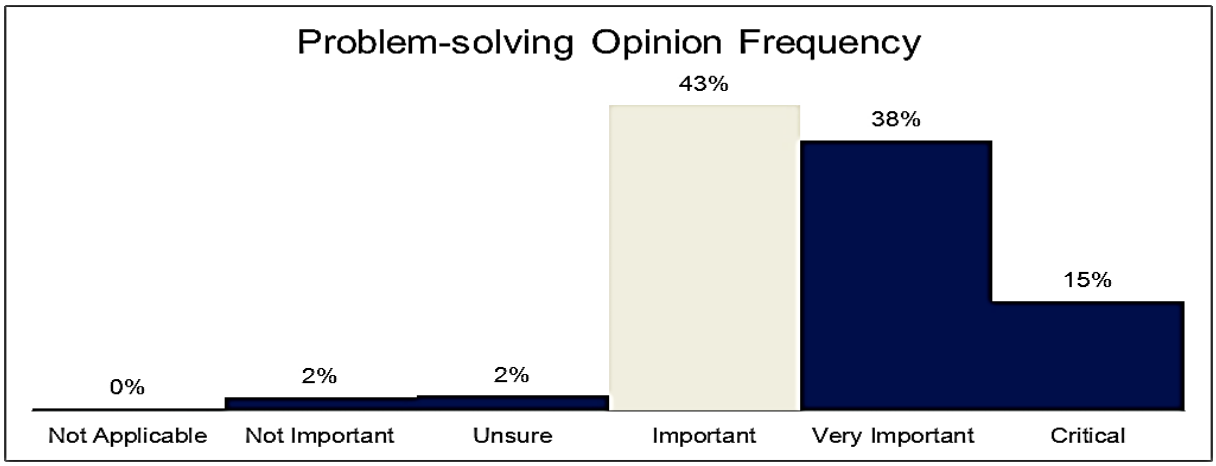


Figure 6.8: Opinions on problem-solving behaviours

While no single behaviour of problem-solving could be seen more or less important than the others, the behaviour *Meaningful contribution to problem-solving* emphasises the responsibility of interns to contribute to seeking optimal solutions to problems, also by involving others in the process. Inherently, it indicates the added responsibility to seek solutions actively and not sit back and accept circumstances

as a given. The social element of working in conducive environments through constructive social interactions and positive resolutions to problems was also highlighted in the findings. The skill of complex problem solving was also indicated as a top skill during the 4IR. The complexity of the environment will demand teamwork and collaboration in solving problems. Interns need to realise the importance of entrepreneurial literacy in supporting their role in these teams (see 3.3.2.8).

f) Self-management behaviours

Opinions on *Self-management behaviours* ranged from not important to critical, with the majority consensus settling on important (mean = 4.81; mode = 4). The majority of respondents regarded self-management as an important skill.

Self-management behaviour consists of the five categories of Self-motivation, Self-belief, Self-awareness, Responsible behaviours, and Manage own emotions. Manage own emotions represents 44 % of Self-management, followed in equal value contribution at 21 % by Self-belief and Responsible behaviours.

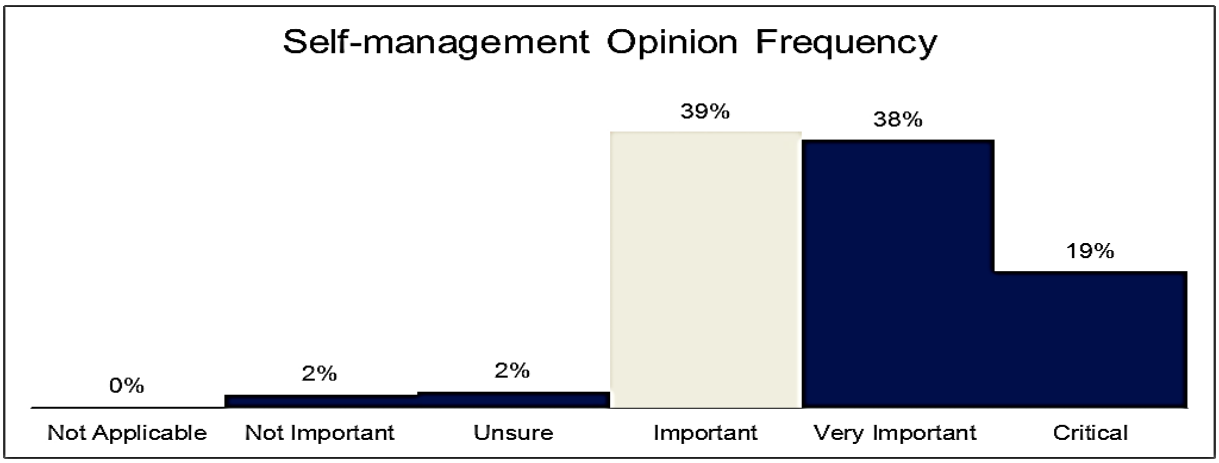


Figure 6.9: Opinions on self-management behaviours

Further analysis of the sub skill behaviours indicates that the respondents regarded Self-motivation, Responsible behaviour, and Self-motivation as very important skills. If fact, 28 % of the respondents believed that responsible behaviour was even critical in the workplace. In contrast, Self-belief, Self-control, and Self-awareness were regarded as only important.

Self-management directs workplace environment and team cohesiveness. Accordingly, it is no surprise that the respondents rated the requirement to manage own emotions highly. The 4IR megatrend of Individualism will further place pressure on leaders to promote team cohesiveness and facilitate engagement (see 2.4.3). In turn, leadership will increasingly demand interns to manage their emotions and show responsible behaviour in managing an optimal work environment.

Self-awareness, self-belief and self-motivation correlate directly with self-efficacy, which in turn is closely related to performance and resilience during times of challenges and organisational changes (see 3.3.2.3 and 3.3.2.4). While leadership demands from interns to manage their emotions and behave responsibly, a similar responsibility resides with leadership to manage their emotions and behaviours to support the self-regard of interns to maximise self-efficacy. Nothing is truer when dealing with employees than the saying "for every action there is a reaction". Inappropriate leadership behaviours often invoke negative behaviours and attitudes from subordinates. Leadership should set the example for interns as to what behaviour is expected from them in terms of appropriate workplace behaviour.

6.2.5.1.5 Opinions on skills related to social capital capability behaviours

a) Team participation behaviours

Team participation behaviours are represented by Team contribution; Social intelligence, Emotional intelligence, and Diversity management. Opinions on team participation ranged from not important to critical, with the majority consensus settling on important (mean = 4.47; mode = 4). The majority of respondents regarded the skill as important.

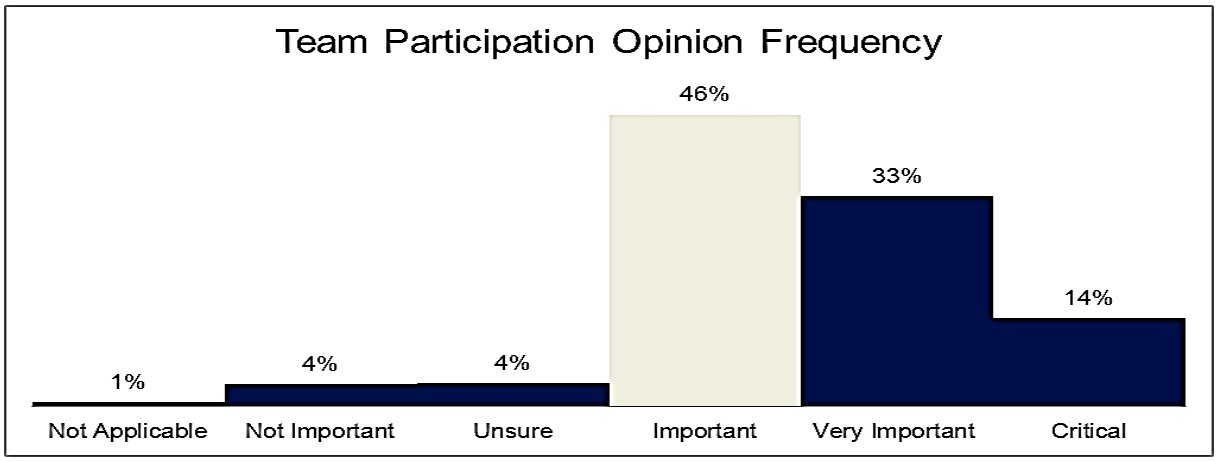


Figure 6.10: Ranking of team participation behaviours

A conducive workplace environment is necessary to optimise productivity. The Ability to form working relationships behaviour is ranked as very important. Being competent in working with others and dealing with team dynamics will support organisational performance during the 4IR period. Accordingly, an important duty rests on the intern to work closely with others and to support and guide them where necessary. Again, competency will be reflected in interns' behaviour and attitude. Together with self-management, team participation will be a primary determinant of observable employability.

In addition, diversity management has become increasingly important in the global environment in which Eskom is operating in terms of employees and suppliers. Hence, leaders need to ensure that interns are duly aware of the expectations of the company in terms of emotional and diversity literacy.

b) Communication behaviours

Opinions on communication behaviours ranged from not important to critical with majority consensus settling on very important (mean = 4.60; mode = 4).

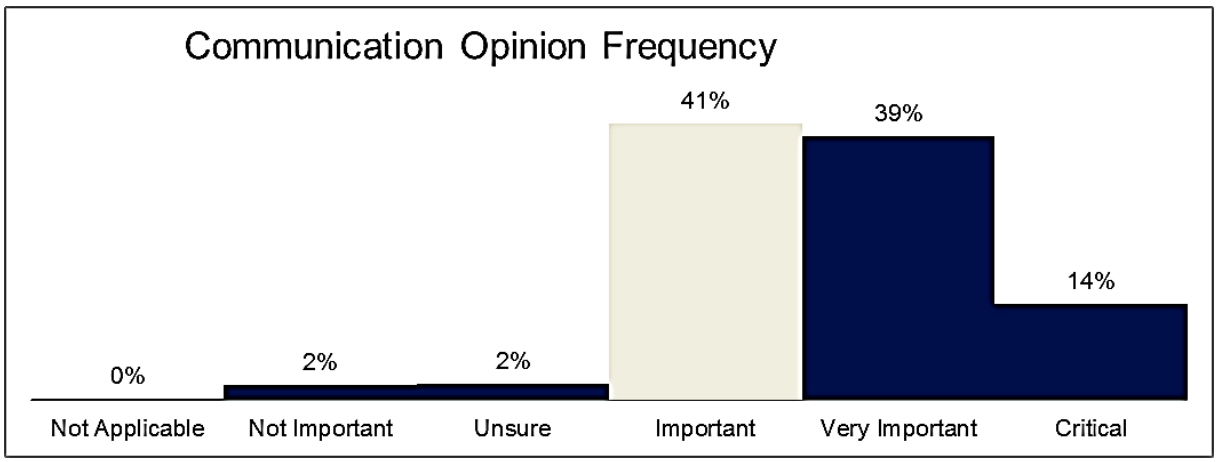


Figure 6.11: Opinions on communication behaviours

The factors leading to successful communication are linked directly to social capital (section 3.3.4) and cultural capital (section 3.3.5). The lowest loading coefficient was obtained for *Share information willingly,* which might be misleading as to the criticality of the specific behaviour. PsyCap (section 3.3.3) plays a significant role in the determination of attitude. Without the willingness to share information, communication can be destructive to the organisational objectives.

6.2.5.1.6 Opinions on skills related to human capital capability behaviours

a) Analytical behaviours

Opinions on analytical behaviours ranged from not important to critical, with the majority consensus settling on very important (mean = 4.70; mode = 5).

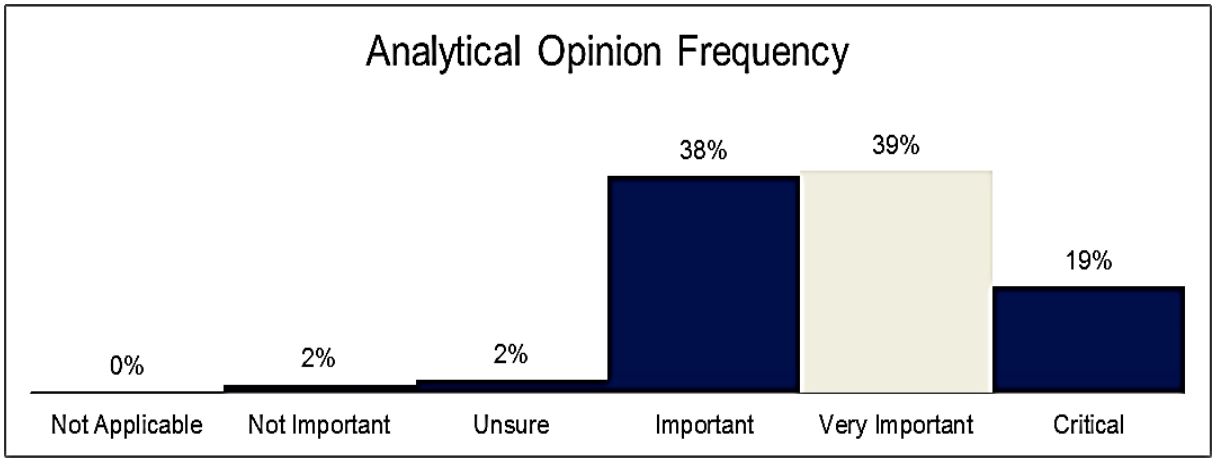


Figure 6.12: Opinions on analytical behaviours

Analytical abilities do not focus only on breaking down complex issues. Moving forward, the ability to read between the lines will become more and more important. Being quicker to see the potential of progress or failure through gap identification, seek the logic where others only see chaos, connect the dots, and the relationship between what is and what can be (see section 3.5.2) will provide a competitive advantage to organisations. An analytical ability can generate visionary ideas in support of innovation (section 4.2). The ability to analyse will encourage interns to cross more boundaries in support of holistic problem-solving, making them indispensable in terms of employability.

b) Decision-making behaviours

Opinions on decision-making behaviours ranged from not important to critical, with the majority consensus settling on very important (mean = 4.72; mode = 5).

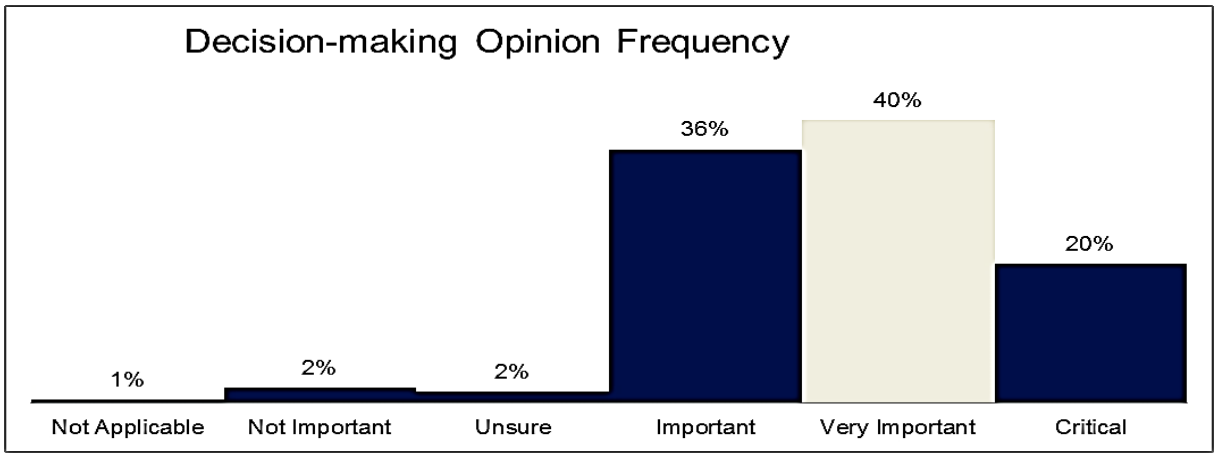


Figure 6.13: Opinions on decision-making

There is a high correlation between the behaviour *Make decisions that take into account all aspects* and the components emphasising the critical importance Eskom experts linked to having a holistic view. In addition, the consensus ranking of very important linked to the ability to evaluate future implications of current decisions and actions indicates the effect that proper decision-making can have on organisational success.

6.2.5.1.7 Opinions on skills related to zero harm capital capability behaviours

a) Ensure zero harm behaviours

Opinions on zero harm behaviours ranged from not important to critical, with the majority consensus settling on very important (mean = 4.96; mode = 6).

Zero harm was indicated as a critical skill in Eskom and can be considered as a priority area of Eskom when determining which soft skill behaviours will add the most value to the organisation for prioritisation.

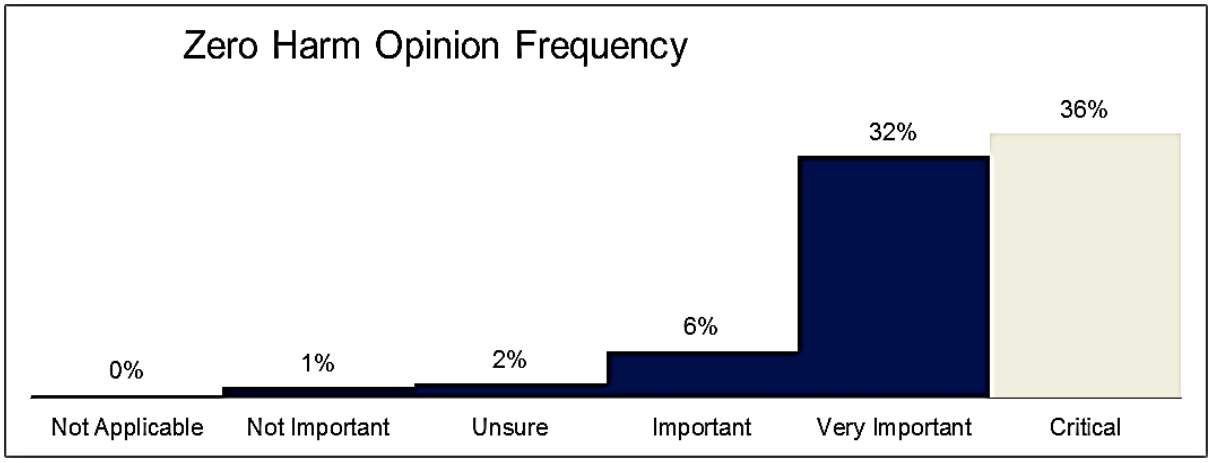


Figure 6.14: Opinions on zero harm behaviours

The four behaviours related to health and safety, and environmental care highlighted as critical are linked to the newly defined Employability Capital Zero Harm (section 4.5). Workplace safety consciousness is a leading indicator of employability. The essence of Eskom's operational activities in itself renders the compliance to Environmental legislation and policies a critical focus area in Eskom. To such a degree, that Environmental compliance is one of Eskom's top 10 focus areas in terms of strategic intents. The importance rating of critical assigned to Zero Harm aligns with the strategic intents of Eskom.

6.2.5.1.8 Opinions on skills related to PsyCap capability

a) Self-development behaviours

Opinions on self-development behaviours ranged from not important to critical, with the majority consensus settling on very important (mean = 4.77; mode = 5).

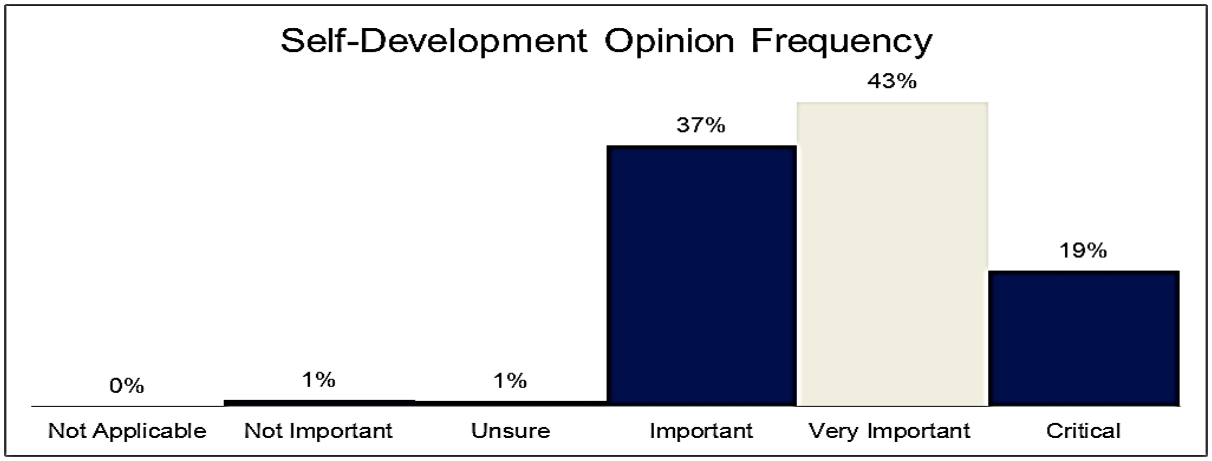


Figure 6.15: Opinions on self-development behaviours

Self-development behaviours relate to the concept of career management (3.5). The high importance allocated to the behaviours was supported by the highly ranked behaviours of Seek ways to improve own knowledge and skills, Being willing to learn new skills, Takes advantage of learning opportunities provided, Be willing to learn continuously, Managing own learning, and Keep up to date on technical knowledge and new developments. In addition, an important consideration was raised in that learning is a two-way street with participation and communication requirements. It is expected that interns ask questions and drive their own learning (M195). The view strengthens the concept that learning cannot be regarded as a single responsibility of the trainer for Information transfer and learning management. It remains the responsibility of the intern to adopt a lifelong approach of self-development and reflection.

Self-development is a function of a continuous willingness to learn, reflect, and proactively seek ways to improve own knowledge and skills. The skill of continuous learning has been highlighted as one of the top ten 4IR skills (Table 4.1). Continuous learning and self-development, through the important practice of reflection and entrepreneurial literacy, will also strengthen interns' PsyCap (3.3.2.8).

b) Adaptability behaviours

Opinions on adaptability behaviours ranged from not important to critical, with the majority consensus settling on important (mean = 4.56; mode = 4).

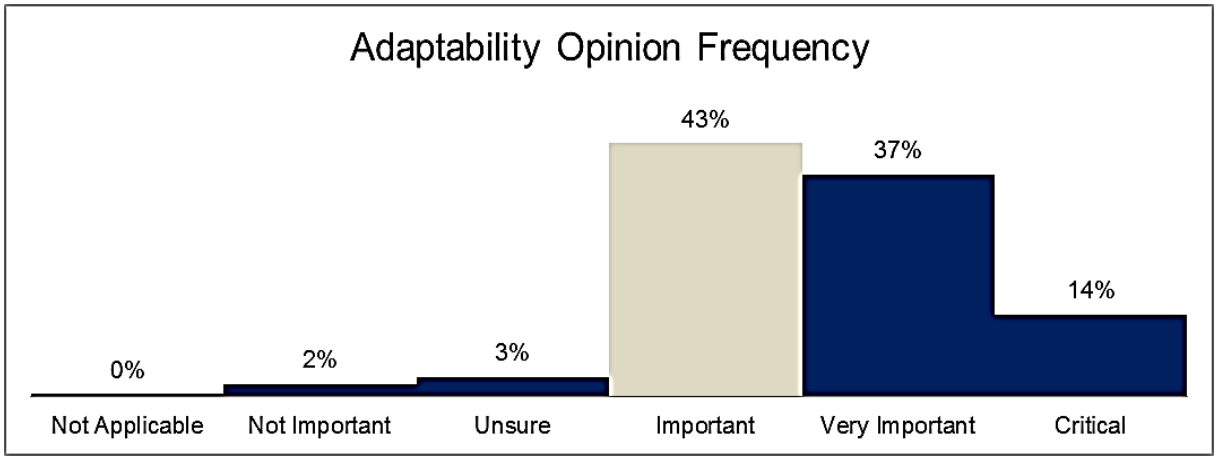


Figure 6.16: Opinions on adaptability behaviours

The ability to adapt to complex and dynamic changes is posited by the 4IR markets as a critical requirement for all (see section 2.4.1.3), but more so for organisations. The findings support the notion that the ability to adapt swiftly to satisfy the ever-changing demand for new products and services will be an important factor in employability decisions. Employability capital is advanced through the psychosocial construct to promote proactive adaptability to changing environments (see section 3.3.3). A certainty is that interns will have to adapt at a quicker pace than previous generations did to keep up with 4IR demands. Highlighted as one of the critical 4IR skills, the strong opinion raised on the behaviour *Adapt to requirements that are changing*, is certainly warranted.

c) Continuous improvement behaviours

Opinions on continuous improvement behaviours ranged from not important to critical, with the majority consensus settling on important (mean = 4.72; mode = 4).

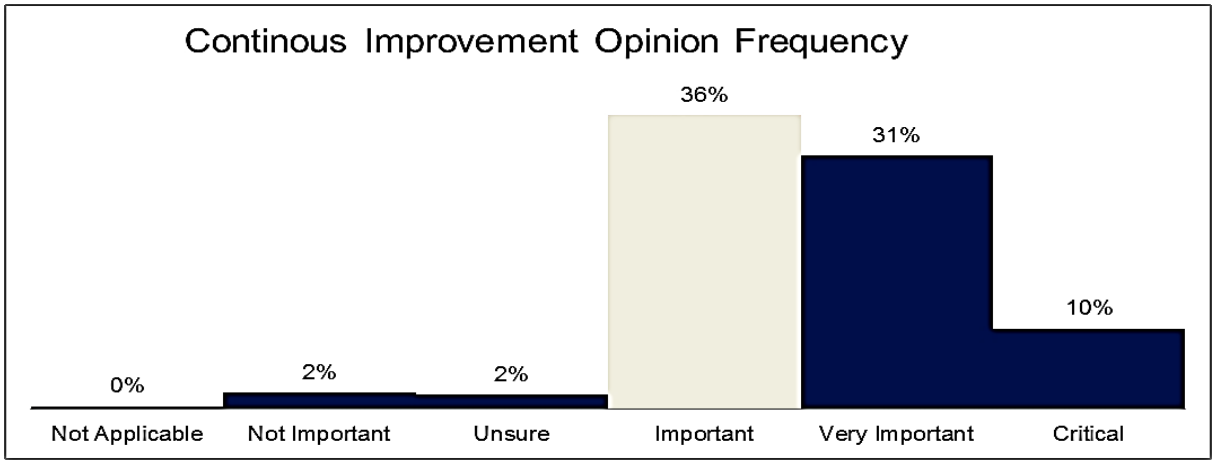


Figure 6.17: Opinions on continuous improvement behaviours

Traditionally, continuous improvement has been linked to quality requirements. A high correlation was reported between continuous improvement and the behaviour of *Stay open-minded and encourages*

others to bring new perspectives. For two behaviours, namely *Stay open-minded and encourages others to bring new perspectives*, and *Seek better ways to do things,* a mode ranking of very important was reported. This indicates that the traditional view is changing from one of strictly quality to one where continuous improvement will involve multiple other factors, including innovation and cross-learning.

d) Resilience behaviours

Opinions on resilience behaviours ranged from not important to critical, with the majority consensus settling on the skill as important (mean = 4.49; mode = 4).

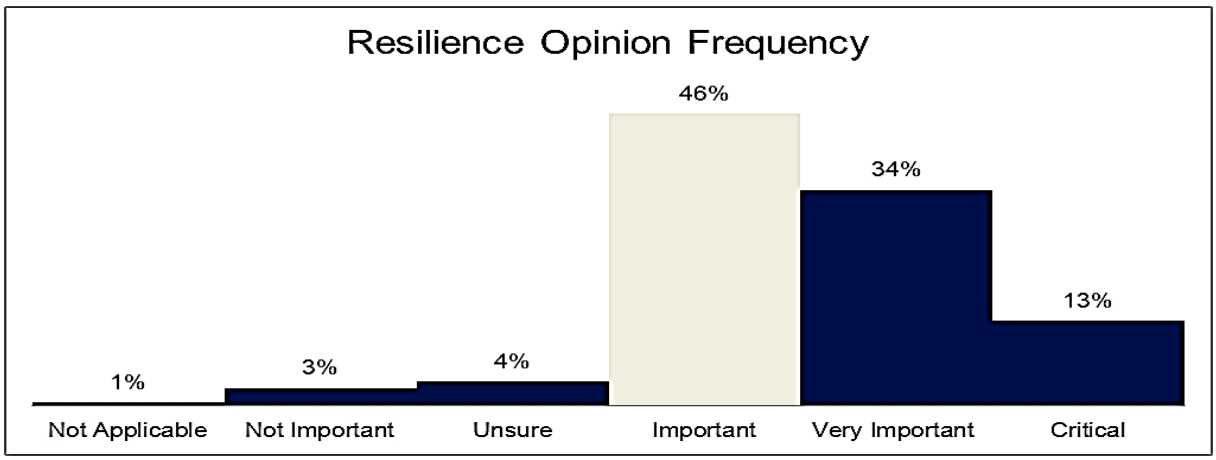


Figure 6.18: Opinions on resilience

Many scholars emphasise resilience, one of the top ten 4IR skills, as a critical survival skill for challenges not only posed by the workplace environment but also the stringent performance requirements demanded from the external environment (see section 4.2). In addition, the ability to be resilient is related closely to the skill of adaptability. Balancing the act in managing stress and work-life contributes to the holistic being of an employable intern.

In the next section, the qualitative opinions collected concurrently in the open-ended question of the survey are discussed.

6.2.5.2 Qualitatively collected soft skill behaviours

Inclusion of the open-ended question had two purposes, namely the determination of any additional skills that should be added to the original soft skill database, and secondly, to understand the rationale of the opinions raised in the quantitative section of the survey. The section will commence by first discussing the response rate and demographic details of the participants, followed by the results of the option to add any additional soft skill behaviours.

6.2.5.2.1 Demographic detail of participants and response rate

The qualitative data were collected by means of an open-ended question during the quantitative data-collection process. The qualitative results are presented in the voices of the participants. Results indicate that 25 % of the respondents participated by adding soft skill opinions in the open-ended question. Fifty-three MPS (72 %) and 14 supervisors (28 %) expanded their quantitative selections with qualitative remarks. In turn, the older participants (aged 41 and older) represented the majority view. The participants of the age group 26-30 did not offer any opinions to consider. This might be due to their relatively short employment period, which limits experience in specific skills. Eighty percent of the participants had degree qualifications, and 54 % had postgraduate degrees (see Table 6.15). This gives confidence that the participants had more holistic knowledge to add value to the process.

Table 6.15: Response Rate and Demographics of Participants: Soft Skills Contribution

Qualification and Age	26-30	31-40	41-50	51 and above	Total	Response Rate
Certificate		3		3	6	
Diploma		1	1		2	
Higher diploma			1	4	5	
Degree		3	11	13	27	
Postgraduate degree		8	10	14	32	
Other				2	2	
Total	0	15	23	36	74	25 %
Respondents invited to render views	10	63	101	124	298	

Source: Compiled by the researcher.

The 103 soft skill behaviours and opinions raised during the qualitative data collection were categorised in soft skill themes. The results and interpretations are presented in terms of the skill categories allocated to the qualitative opinions. First, the additional skills identified will be discussed in the next section.

6.2.5.2.2 Determination of additional skills to be added to the soft skill behaviour set

The original item list on the quantitative measurement instrument and the grouped qualitative skill behaviours were compared. The comparison indicated that the qualitative soft skill competency behaviours were already, in one form or another, accounted for among the listed items in the original instrument.

The view that the following soft skill behaviours should be added to the original list was considered:

S191: The ability to be able to work individually and to make and perform the right decisions.

The skill behaviours Work on own (item 135) and Make decisions that take into account all aspects and components (item 162) account for the suggested behaviours.

The following was also added:

U61: “Resilience in a changing environment and how to deal with persons living with disabilities in the workspace, issues of gender and work-life balance, negotiation skills, emotional intelligence”.

The proposed skills subscribe to skill behaviours like the ability to respond and integrate change with minimal resistance (item 125), team negotiation skills (item 112), managing others' emotions (item 115), and inclusion would imply duplication of contexts. The comprehensive list of qualitatively indicated soft behavioural skills and their associated soft skill behaviours in the original measurement instrument is presented in Appendix L.

The measuring scale was found to be sufficiently comprehensive and representative of the soft skill behavioural elements that would indicate intern employability. The researcher did not find it necessary to add any additional soft skill behaviour items to the original set of items.

6.2.5.2.3 Overview of qualitative opinions raised on soft skill behaviours

One hundred and three views raised by the participants were recorded. Team participation (25 %) rendered the most opinions, followed by KnowYBusiness (11 %), Self-development (10 %), Performance (9 %), Governance (8 %), Resilience (8 %), and Self-management (8 %) as the top seven skills considered. The high qualitative contribution to Team participation justified a closer look to determine the elements considered the most. Emotional intelligence (58 %) made the highest contribution to the topic. The soft skill behaviours and perceptions raised by the participants are presented in Table 6.16.

Table 6.16: Summary of responses and frequency of the participants per soft skill behaviours

Soft Skill	Frequency	Contribution	Soft Skill Behavioural Requirements	
Team Participation	26	25 %	• Emotional intelligence • Diversity Management • Social Intelligence • People management • Effective team member	• Conflict management • Negotiation • Peer checking skills • Respect • Open-minded. • Recognise inter-dependency
KnowYBusiness	11	11 %	• Be not be intimidated by work environment	• Consider workplace environmental factors
Self-Development	10	10 %	• Willingness to learn • Seek ways to improve own knowledge and skills • Ask questions	• Drive own self-development • Learn from others • Self-awareness (reflection)
Performance	9	9 %	• Hardworking • Know job and interfaces • Planning and Scheduling • Customer orientation • Solution orientated • Work with high volume of data • Organisational goals • Pride in output	• Business acumen • Understand vision and your role • Understand how the organization works • Understand Eskom Value Chains • Understand quality principals
Governance	8	8 %	• Governance • Ethics	• Integrity • Follow rules
Resilience	8	8 %	• Competence comes with time and experience • Stay positive in bad situations • Resilience • Perseverance	• Working well under pressure • Deal with conflicting work tasks • Start at the lowest level and learn • Endurance
Self-Management	8	8 %	• Leading self • Self-awareness • Self-management • Humility	• Self-value • Acknowledge inter-dependence • Self-starter
Communication	5	5 %	• Presentations • Effective Communication	• Communication types
Analytical	4	4 %	• Analytical • Systems Thinking	• Benchmarking
Continuous-Improvement	3	3 %	• Challenge decisions • Open-minded	• Prevent re-work
Zero-Harm	3	3 %	• Safety awareness	
Adaptability	2	2 %	• Respond constructively to change	• Strategic intelligence to assist with changing conditions.
Decision-making	2	2 %	• Quantitative Risk Analysis	• Decision-making
Innovation	2	2 %	• Think outside the box	• Creativity
Problem-solving	2	2 %	• Root cause analysis	• Problem-solving

Source: Researcher.

6.2.5.2.4 Perceptions of intern personality and attitude

Various participants mentioned behaviours directly related to graduate capital. In line with scholarly views, one participant (M186) indicated that the characters of interns are the foundation of any skills and an important indicator of employability potential (see section 3.3.2.1). The participants believe that attitude, loyalty, authenticity, humbleness, self-discipline, willingness to contribute, responsible and positive behaviour, support the chances of an intern to be employable. A few also warn that self-importance, arrogance, and a know-it-all attitude will not be tolerated – indicating that interns that display these behaviours will not be considered for employment. The views indicate awareness by management of the destructiveness that personality and negative behaviours can have in the workplace and output. Interns should take note of their attitude, which will truly determine their way forward.

6.2.5.2.5 Perceptions on soft skill behaviours related to zero harm capital

Safety consciousness in the workplace is regarded as a leading indicator of employability in an electricity-provisioning environment (see section 4.5.2). This view is confirmed by the participants who reached consensus about the critical importance of developing safety skills in the organisation. Notably, it is emphasised that safety is a collective responsibility. A further proposal was made that safety lessons should be shared to enhance intern learning.

Internships can be considered an ideal setting to practise risk assessments and safety practices, under supervision, in unfamiliar and dangerous conditions (see section 4.5.2). Hence, M70 advises, *"Experiential learning is important, as it assists when work is performed on a site … When it comes to the operational side of the business, especially safety, they lack experience".*

6.2.5.2.6 Perceptions on soft skill behaviours related to identity capital

a) Governance behaviours

As expected, participants felt strongly about ethical behaviour and considered it a very important to critical behaviour. Similarly, honesty, governance, and integrity were regarded as very important. Another manager (M98) believed that punctuality (self-discipline) was also a critical requirement. One participant (M173) stressed that internship should revolve around "*three critical words: integrity, values, respect",* while another (S138) added adherence to procedures. As experienced in Eskom, honourable behaviour is a critical soft skill, as its absence can cause the downfall of an organisation (see section 3.3.2.6). The high importance the participants linked to this soft skill brings special attention to the lessons learnt from poor governance experienced by Eskom in recent years.

b) Performance behaviours

The participants highlighted eight associated behaviours to present the individuals' contribution to organisational performance. Emphasis was placed on planning and scheduling skills that would limit rework (M95) and indicated pride in performance (M248). The view emphasises the importance of dedication, cost-savings, and efficiency, which contribute to successful organisational turn-around strategies (M236). Another participant added that interns should be more customer-orientated (M38), while another emphasised the importance of "*looking for solutions rather than excuses*" (M300). The same participant advised that interns should ensure that they understand their jobs and everything related to them in order to add true value to the value chain. M159 summarised performance requirements of interns by stating that the only requirement for them is to be hardworking and diligent.

An important identity capital principle is associated with performance, namely the contribution of the 'self' to a positive workplace environment and organisational performance (see section 3.3.2). Participants attached value to soft skill behaviours associated with interns' willingness to give of themselves towards the organisational objectives.

c) KnowYBusiness behaviours

KnowYBusiness received the second most comments by the participants. Intern awareness and readiness to support the organisation were emphasised by behaviours highlighted in terms of external environment awareness (M3), an understanding of how the organisation works (M98), the understanding of how they can contribute towards the company vision (S176), and the bigger picture (M177*).* One participant raised the matter that interns should be fully aware of how the global markets affect the organisation. Historically, interns were expected to learn how to perform tasks related to their education. The opinions voiced by the participants indicated a clear shift in the knowledge expectations from interns. From a single base of knowledge, interns must now be global citizens who can contribute knowledge over a range of tasks and strategies. The expectation places more emphasis on the importance of self-development to keep up with the ever-changing global markets. It is notable that the role of the intern has changed from "carrying the tools and observe" to one of sophisticated contribution. Leaders should take note of this development and adjust their strategies to accommodate the changed role.

d) Innovation behaviours

The ability of interns to think outside the box (M35) and present creative skills (M172) was highlighted as critical. Again, these requirements are surprising, – given the historic perception that interns should keep their mouths shut and look and learn, as stated by a middle-aged supervisor (S207), "*They are there to learn, not to reinvent the wheel [critical], Ability to do what you are told [very important], They are there to work, not make friends [critical]."*

To align with the new role of interns and expectations of the majority, it is evident that leadership should be on the same page about the role expected of the new-world intern. The criticality of innovation in the

4IR cannot be overstated, as it will determine the success or failure of many organisations (see section 4.2). All hands should be on deck to seek new and better ways for the organisation to prosper and find its way back to success.

e) Self-management behaviours

Participants highlighted self-management as an important skill and emphasised identity capital in driving behavioural choices (see section 3.3.2) as being a self-starter (S55), being disciplined (U253), having humility to accept interdependence (M237), and being self-aware. One participant summarised the critical importance of self-esteem and self-efficacy and described it as *"the notion of valuing oneself so that you can be able to value your organization, colleagues, and property, and equipment, internal and external customers"* (M302). The responsibility of the intern to derive self-efficacy is clearly demarcated and aligned to every facet of the organisational value chains. Participants viewed the ability to take responsibility for behaviour and actions as very important; – thus, interns should operate from an internal locus of control position (see section 3.3.2.8). Through self-efficacy, identity capital can be linked to human capital.

6.2.5.2.7 Perceptions on soft skill behaviours related to human capital

a) Analytic behaviours

The participants believed that analytic abilities under pressure are very important. One participant (M20) summarised the critical importance of analytical thinking for interns as follows: *"The transition to becoming world class in terms of thinking is vitally important. International benchmarking and comparison in terms of working is thus critical for the skills set to remain competitive in the global sense."* In addition, the ability to extract relevant information (S263) and system thinking (M242) in incorporating the entire value chain was also presented. Analysis of information and decision-making are important capability outcomes of self-efficacy (see section 3.3.4). In turn, self-efficacy is a predecessor of job performance (see section 3.3.2.2). The consensus views of the participants indicate the importance of self-efficacy for job performance and the development of intern employability.

b) Decision-making behaviours

The capability of interns to make proper decisions proved to vary between the opinions of important and very important. The indecisiveness might be linked to the historic perceptions of interns where they were not allowed to take decisions but only observe and learn. It is evident from the opinions that management did not expect interns to make direction-changing decisions but to focus on factors like root causes and risk analysis in order to arrive at appropriated decisions, consider the consequences of decisions on long-term goals, and by looking at various options and from different angles. Decisions should be made holistically and with due prioritisation (S267). In addition, one participant (M300) highlighted the need for

an attitude of "*look for solutions rather than excuses".* A positive attitude is linked to the skills directed by PsyCap.

6.2.5.2.8 Perceptions on soft skill behaviours related to PsyCap

a) Resilience behaviours

Participants discussed resilience in depth. The abilities to manage and persist in difficult and changing situations and environments are considered critical requirements for interns (see section 3.3.2.1). The opinions are raised in terms of the changing environment (U61), the ability to withstand "*abrasive demeaning environments" (*U275*),* Eskom ambassadorship (M58), being patient and work well under pressure (M147), and the capacity to deal with competing demands and challenges (M130). Resilience in the ever-changing world of work will be important during the turn-around phase of Eskom and even more so to face the challenges of the 4IR (see section 2.4.3). However, the participants highlighted that resilience is not only about coping with change but, in addition, perseverance in spite of pressure and poor working conditions inside the business. Emotional intelligence is linked as a predecessor to resilience, which also supports the notion that interns with a higher EQ will be able to cope better than interns with a low EQ will.

b) Continuous improvement behaviours

From an organisational point of view, continuous improvement involves the adjustment of the organisation in line with best practices, client requirements, and market demands. While this is an important practice in organisation productivity and survival (see section 3.4.2), participants regard the need for individuals to improve their efficacy, attitudes, and soft skills continuously as essential and critical for management. The requirements for interns to challenge and interrogate decisions without fear for retribution (M69), to be open-minded (S55), reflect, be willing to work and learn and take responsibility, and learn from mistakes (M108) were recognised. The views are in line with the scholarly view that improvement in behaviours, views, and processes is regarded as a cornerstone of organisational survival in the 4IR (3.4.2). Leadership should make opportunities to improve continuously a focus area to motivate interns to interrogate practices, reflect on decisions, and manage incidences to encourage growth.

c) Self-development behaviours

The soft skill of self-development is associated closely with continuous improvement. The skill received the third highest opinion contribution by the participants. In addition, linked to the second-highest skill of KnowYBusiness, the majority of participants regarded development as very important, if not critical.

Emphasis was placed on the responsibility to self-develop knowledge and skills, the willingness to learn, listen, and implement. Various participants believed that interns should take self-responsibility for and play an active role in driving their own development. This can be done by being inquisitive and seeking more information than is offered (M195). In addition, one manager (M215) advances that interns should be aware of their effective learning styles and pursue those styles.

Some participants believed it was appropriate to warn interns not to have"*a know-all attitude"* (U253) *and "not to reinvent the wheel"* (S207). This stance contradicted the majority view that the development of entrepreneurial literacy was very important based on its critical importance as a core driver of economic growth and competitive advantage during the 4IR (see section 3.3.2.8). In fact, the majority view was that interns should interrogate decisions and other views to support learning.

Sound advice was also offered by other participants who wanted interns to know that "*growth comes with experience and it takes time to become an expert in one's field"* (M76). Again, the matter of patience was raised when it came to progression in Eskom. One manager (M107) highlighted the important ability and attitude of interns to "*be willing to start at the lowest level and learn on every level to be able to have a proper understanding of all systems before expecting to be promoted".* Self-awareness might assist interns to practise patience in their drive for career success (section 3.3.2.5).

d) Adaptability behaviours

Employers considered adaptability as a primary condition for organisational performance and growth during periods of change (see section 3.3.2.5). Therefore, it is not surprising that participants highlighted the importance of behaviours that would assist interns to respond constructively to change as critical. One participant (U277) believed strongly that strategic intelligence should be incorporated as a soft skill to navigate change. However, strategic intelligence is described as the "ability to anticipate competitors' behaviour and pre-empt it" (Levine, Bernard & Nagel, 2017:2390). According to this definition, strategic intelligence should resort under performance drive rather than a requirement for change. Organisational change management and the support for it are derived from emotional intelligence leadership and affective factors (see 3.3.4). Therefore, it would be more appropriate to consider the management of organisational change in the affective, and not in the strategic, domain during internship programmes. Thus, this concept links PsyCap and identity capital to the social capital elements.

6.2.5.2.9 Perceptions on soft skill behaviours related to social capital

a) Communication behaviours

Communication, and the speed thereof, will become increasingly important in the 4IR (see section 2.4.3). In line with this view, five participants regarded communication aspects as critical, including the effectiveness of it, articulation of the message, and the various methods used in communication. One participant believed that communication protocol (M258) should also be considered. While communication protocol is often deemed appropriate, it can also hamper the ability to open avenues to develop trust and establish networks deemed critical in optimum organisational functioning and staff engagement (3.3.4). This is often observed in the silo mentality that exists in Eskom.

b) Team participation behaviours

Team participation generated the most skills behaviour attention (25). Broadly, the comments raised can be divided into three sub themes, those related to emotional intelligence, social intelligence, and effectiveness in a team setup.

Participants warned that emotional intelligence skill behaviours should be considered critical for interns to manage the workplace environment. Linked to emotional intelligence were the skill opinions of interdependency with other (M248), peer checking (S18), emotional intelligence (M215), respect for self and others (M98), self-discipline, not to have a know-all attitude, flexibility and respecting others (U253). The element of respect was raised 22 times in the comments made, – highlighting the importance of interns to show *"respect for whoever you are dealing with, irrespective if the person is the CEO or the toilet cleaner; the respect should be the same at all times"* (M180).

Participating in a team setup was linked to –making the right decisions for the benefit of whole team (S191), people change management (M41), being able to form part of an effective team (M36), conflict management (M147), the ability to apply peer pressure, respect for others, humility to accept that you may be dependent on assistance from others (M237), listening (S153), and negotiation skills (U61). Within the frame of team participation, support of and respect for others, conflict management, and team motivation were raised as critical requirements for interns.

Interns should have social intelligence capabilities, which encompass open-mindedness (S55), people management (M273), solving problems and conflicts, communicating (S211), ability to tolerate different cultural backgrounds (M3), use of sensitive language (M3), treating others with equality, and respecting them (S170). A manager raised the importance of interns to respect the knowledge of others, – despite their age, race, and language proficiency (M237). Another manager raised the necessity of interns to have *"the ability to handle toxic workplaces ... bullying and harassment"* (M49), which indicates concern over a conducive workplace environment. The manager highlighted that it was critical for interns to have the capability to "*speak positively to find ways to reduce bullying and harassment".*

While emotional intelligence supports an individual's ability to cope with workplace environmental demands and pressures (Table 4.4), it remains managements' responsibility to ensure a conducive

workplace environment. Interns, on the other hand, should have sufficient PsyCap abilities to be equipped to deal with teamwork demands (3.3.3.) and the workplace environment (see 3.3.4).

In contrast, other managers believed that emotional intelligence and social skills were not employability capability requirements for interns:

> M237: "Being an intern, it is not expected that you have many well-entrenched people/management skills."
>
> M41: "Not for interns, but generally: People change management."
>
> M166: "A trainee skills should not contain a lot of emotional intelligence stuff. It's a skill we learn as we progress; otherwise, it frustrates them."
>
> S207: "They are there to learn, not to reinvent the wheel – Critical ability to do what you are told. They are there to work, not make friends."

A factor that might affect these counterproductive views on emotional and social intelligence behaviours might be a lack of knowledge relating the facilitation role that PsyCap, emotional and social intelligence play in transferring capabilities to soft skill competency (see section 3.3.4). On the other hand, all managers and supervisors have been trained extensively in the Eskom leadership brand pillars. The pillars guide management in what is deemed appropriate behaviour in the workplace to set the trend for required behaviour. It involves (i) leadership with the heart of a servant, (ii) leadership that creates a learning environment, (iii) leadership characterised by good governance, and (iv) leadership characterised by disciplined execution. Van Dierendonck (2011:1228) argues that servant leadership is the "most important mediating processes to encourage self-actualization, positive job attitudes, performance, and a stronger organisational focus on sustainability and corporate social responsibility". Accordingly, during the servant leadership module, the criticality of emotional and social intelligence is stressed as the foundation of all the leadership pillars respectively. Linked to remarks of a non-conducive workplace environment, these counterproductive views raise concerns regarding the readiness of some management in executing an appropriate intern learning experience.

In essence, one manager (P192) summarised the true foundation of soft skills as "making a contribution wherever you are in the world – for the benefit of mankind".

The participants' views will be triangulated against the quantitative behavioural skills and literature next.

6.2.5.3 Triangulation of soft skill behaviours

Considering the overall results, it is indicative that the various sample respondents and participants agreed about the inclusion of all the soft behavioural skills in the framework. Some similarities were found

regarding the value contribution of the individual themes and their behavioural elements. The similarities and differences between the different sample groups were considered to identify shortcomings that might affect development of intern employability. Triangulation was conducted on elements that stood out during the separate analyses of the quantitative and qualitative data.

6.2.5.3.1 Opinions raised on the behaviour of respect

The element of respect was raised 22 times by the participants. This over emphasis indicates that respect of interns towards others might be a problem or that generational differences might have affected participants' perspectives. Conducting a t-test to determine if there was a difference between the mean opinions of the respondent age groups of 20 – 0 years and the group of 41 and above (t-stat 0.906; t-crit 1,651) indicated no significant differences in generation-related opinions. However, a similar test, at alpha 0.05, indicated a significant difference in means between the opinions of the supervisors and those of the managers (t-stat 2.492; t-crit 1,648). The supervisors attached greater importance to the behaviours of being courteous and respectful and having respect for others (very important) while the managers indicated the behaviours as only important. Given that supervisors historically dealt directly with intern development, they might have experienced problems related to intern attitude in terms of respect. The view was supported by the warnings issued by some participants that an attitude of self-importance, arrogance, and know-it-all would affect employability of interns.

6.2.5.3.2 Opinions raised on the workplace environment behaviours

The participants made several comments about intern resilience required for *"abrasive demeaning environments", "ability to handle toxic workplaces"* and *"bullying and harassment"*. Optimal organisational performance is dependent on a conducive workplace environment. The Goleman-Boyatzis model of Emotional intelligence directs that emotional (EQ) and social intelligence (SQ) are the gateway to a conducive workplace. A lack of these two intelligences has an adverse effect on organisational commitment, job satisfaction, and work-related stress (Navas et al., 2018). A study by Hutchinson and Hurley (2013) showed that EQ and ethical behaviour, or the lack of it, has a significant effect on the workplace culture. Analyses of the views of the respondents on EQ indicate that the majority of managers (49 %) and supervisors (41 %) believed that EQ was important. More supervisors (20 %) than managers (10 %) regarded EQ as a critical skill. A concern was raised in that some managers (11 %) and supervisors (12 %) classified emotional intelligence (EQ) as not applicable/not important or unsure for interns. As already established, both EQ and SQ are drivers of soft skills and, according to Goleman (1995), emotional intelligence forms the basis of an individual's behaviour. Managerial participants raised some interesting perceptions in the open-ended space:

> M237: "Being an intern it is not expected that you have many well-entrenched people/management skills."

M166: “A trainee skills should not contain a lot of emotional intelligence stuffs. It’s a skills we learn as we progress; otherwise; it frustrates them.”

It is evident that management did not understand the importance of EQ an SQ in the development of interns. Emotional intelligence is the predecessor of soft skills, in particular with reference to resilience – a critical requirement for changing organisations and during constant market changes.

Another consequence of low emotional intelligence is that it might lead to disrespectful and bullying behaviours in the workplace (LaVan et al., 2007). Failure by leadership to manage such environments would result in the toxic environments described by the participants. A negative work environment might affect other interns’ interpersonal skills, leading to once positive interns being demotivated and underperforming (Ybarra, Kross & Sanchez-Burks, 2014). Therefore, all intern enhancement programmes should commence with considering graduates’ capital, as well as their social and emotional intelligence capabilities.

6.2.5.3.3 Opinions raised indicating leadership behaviour challenges

In addition to a challenging work environment, comments by a supervisor that interns were “*there to learn not to reinvent the wheel – Critical ability to do what you are told. They are there to work, not make friends*” are criticised in the works of Altindag and Kosedagi (2015) as poor motivation for innovation, positive organisational culture, leadership trust, and employee performance. Such an attitude shows a lack of commitment for intern development. In addition, it is not aligned with the four Eskom leadership brand pillars that also require leaders to act with the heart of a servant. It is indicative that the four leadership pillars are not entrenched throughout the leadership levels. This might be due to resistance in changing the historic attitude of autocratic and task-driven leadership. Alternatively, there might be a lack of appreciation for the value that the four pillars can add to the organisation. Irrespective of the reason, such an attitude might have a negative effect on intern development and should be addressed accordingly.

6.2.5.3.4 The effect of poor governance on the workplace environment

Respondents and participants highlighted governance capability as a critical requirement for employability. This is in line with the experienced financial and corporate failings of Eskom. Governance is highlighted as a success denominator in the 4IR era (see section 2.5.4). The consumer market is forcing organisations to apply good governance practices or face the consequences of sanctions. The effect of poor governance is not only experienced and seen in the bottom line of organisations, but also in an increase of prices and an overall devastating economic effect. Interns who fail to present with the appropriate identity capital indicating ethical and integrity propensity, will not be deemed employable. However, development of intern capability for ethical behaviour and compliance with regulations and policies is constrained by the corrupt actions of leaders. A requirement for ethical behaviour is that

management should lead by example. It can be said safely that the ethical failure of Eskom leaders has resulted in the eroding of trust in the organisation. Without addressing trust between leaders and employees/interns, the drive for organisational performance and excellence will suffer.

The foregoing opinions conclude the research question: Which soft skill behavioural competencies does Eskom require? The next section presents the views and opinions of the qualitative Delphi results.

6.3 DELPHI CONCORDANCE ANALYSIS OF ESKOM EXPERT PANEL

The Delphi technique was employed to find answers to three questions:

- Do Eskom subject matter experts support the determined soft skill behaviours?
- Do the subject matter experts agree with the importance ranking of the determined soft skills?
- Is the content of the measurement scale valid?

The panel members were asked to evaluate the information submitted by the respondents and indicate their agreement regarding:

- inclusion of identified skill behaviours in the framework; and
- the importance rating allocated per soft skill behaviour.

By means of an open-ended question, the panel of Eskom experts were afforded the opportunity to add additional competency behaviours. However, the panel indicated no additional items in the qualitative section. It was concluded that the soft skill behaviours were inclusive of all required soft skill behaviours, which confirms content validity.

Firstly, the analysis considered the response rate and demographic information of the participants. Consequently, the results of consensus seeking of the two rounds followed will be introduced. Finally, the researcher considered the deviation between the opinions of the respondents and the Eskom panel by means of triangulation and inferential statistics. Figure 6.5 serves as a reminder of the process that was followed in determining the final set of soft skill behaviours required to derive the primary soft skills.

QUALITATIVE	Analysis and Interpretation
data analysis of Delphi	Section 6.3.1 Delphi response rate
	Section 6.3.2 Demographic information
Ranking	Section 6.3.3 Consensus seeking – Round 1
and	Section 6.3.4 Consensus seeking – Round 2
Kendall's coefficient of concordance	Section 6.4 Triangulation results

Figure 6.19: Illustration of the Delphi concordance data analysis process

Source: Researcher.

6.3.1 Delphi Response Rate

The Delphi process rendered a low response rate. While eight Eskom subject experts were recruited to participate, only three eventually participated. Hassan et al. (2000) advance that a small Delphi sample is deemed appropriate if the data will not be used for external generalisation. The researcher attempted to maximise the panel responses to support the validity of the data. This was done by means of email reminders as well as telephonic requests for participation support. Table 6.16 reports the response rate achieved for the Delphi process.

Table 6.16: Eskom Expert Panel Response Rates

Expertise Type	Invited	Responses received	Response Rate
Eskom Centre of Excellence	3	2	66 %
Human Resources	3	0	0 %
Eskom College lecturers	2	1	50 %
Total	8	3	37.5 %

Source: Researcher.

In considering the poor responses of the selected panel members, it needs to be considered that Eskom is experiencing various changes, including reorganisation. Reorganisation of support structures might have had an effect on the participation rate. One participant of the Human Resources Department reported that the re-prioritisation of the intern programme limited her time to participate in the panel. Even though she previously agreed to participate, she requested to be withdrawn from the panel. No other explanations were received for non-participation.

6.3.2 Demographic Information of Participating Eskom Expert Panel

One of the critical requirements of a Delphi response is the requirements for experienced and qualified, subject expert matters to participate in the process (Okoli & Pawlowski, 2004). Two of the members had postgraduate agrees in the human development field with a minimum of 20 years' experience in the field. The training instructor had a technical diploma with a minimum of 30 years' experience in the development of technical students. All three-panel members were older than 50 years of age. Table 6.17 presents the demographic information of the panel members.

Table 6.17: Demographic Information of Eskom Expert Panel

Expertise Type	Coded	Position	Functional Output
Eskom Centre of Excellence	E1	Snr Management	Human Development Strategic
Eskom Centre of Excellence	E2	Management	Human Development Implementation
Eskom College	E3	Lecturer	Development Transfer

Source: Researcher.

The demographic information of the participants satisfied the requirements for suitability of panel members. Using the mixed-method quantitative sample results, the means of the soft skill behaviours were determined and presented in an ordinal scale to the Eskom panel. A descriptive analysis was conducted to determine if the opinions of the three-panel members were similar. The results are indicated in the following section.

6.3.3 Degree of Panel Consensus after Round 1

After a frequency distribution of the panel members' responses in terms of agreement ranking had been calculated, the results indicated that full consensus had been reached on 81 (35 %) of the soft skill behaviours as rated by the respondents. Partial consensus had been reached on a further 135 soft skill behaviours (58 %). No consensus had been reached on 15 items (6 %) (refer to Figure 6.20).

A possible explanation is that the judges experienced soft skill behaviour importance from different views. This view is supported by the differences in the panel members' functional output (see Table: 6.18). While member E2 is involved on a more strategic company level, E1 is responsible for the roll-out of human development curricula, while E3 is a lecturer. Thus, their interactions with interns were on different levels.

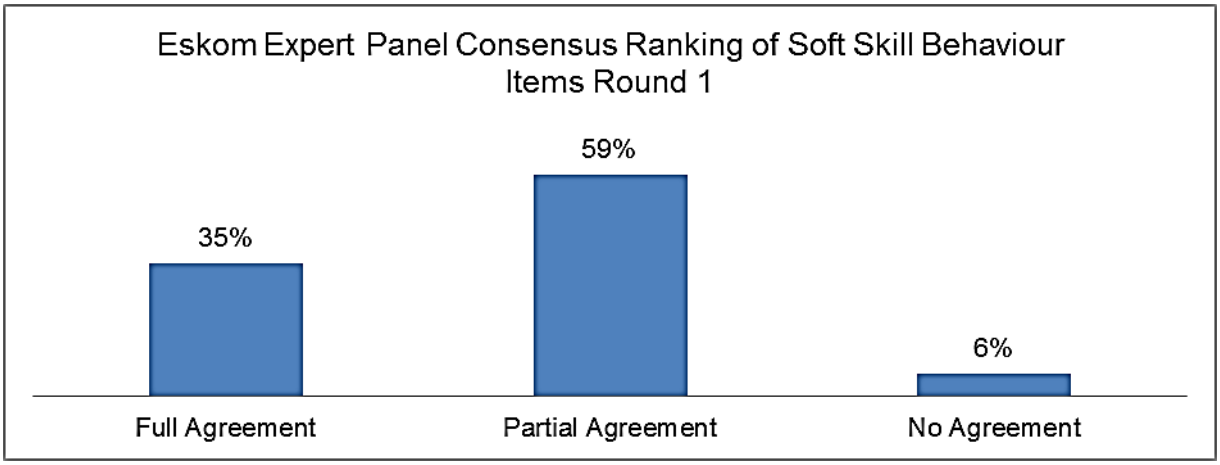


Figure 6.20: Panel member consensus status after Round 1

Even while disagreement still existed on 149 behaviours, the distribution of the panel members' judgements might still be similar across the three panel members. The results of a chi-square test confirmed that the views were indeed homogeneous across the panel members, confirming the goodness of fit (p-value = 1; significance 0.05). However, the analysis of variance (ANOVA) test indicates significant differences between the means as presented in Table 6.18.

Table 6.18: ANOVA Results on Panel Judgements after Round 1

DESCRIPTION					Alpha	0.05		
Group	*Count*	*Sum*	*Mean*	*Variance*	*SS*	*Std Err*	*Lower*	*Upper*
Panel Member 1	231	1042	4.510823	0.372708	85.72294372	0.042503	4.427372	4.594273
Panel Member 2	231	1101	4.766234	0.440768	101.3766234	0.042503	4.682783	4.849685
Panel Member 3	231	1109	4.800866	0.438434	100.8398268	0.042503	4.717415	4.884317
ANOVA								
Sources	*SS*	*df*	*MS*	*F*	*P value*	*F crit*	*RMSSE*	*Omega Sq*
Between Groups	11.59307	2	5.796537	13.89046	1.21823E-06	3.008776	0.245218	0.035868
Within Groups	287.9394	690	0.417303					
Total	299.5325	692	0.43285					

The 14 soft skill behaviours for which no agreements were reached by the panel are presented in Table 6.19. The results indicate that agreement was found between the quantitative findings, E1 on eight behaviours, E2 on five behaviours, and E3 on two behaviours.

Table 6.19: Soft Skill Behaviours with no Agreement between Panel Members

Item	Survey Respondent Mode	Panel Expert E1 Mode	Panel Expert E2 Mode	Panel Expert E3 Mode
Promote and encourage others to keep up to date with the rules, structures, decision-making bodies of the organisation,	Important	Very important	Important	Critical
Maintain continuous, open, and consistent communication with others.	Very important	Very important	Important	Critical
The ability to evaluate future implications of current decisions and actions.	Very important	Very important	Important	Critical
Caring about company success	Very important	Very important	Important	Critical
Work to quality standards	Very important	Very important	Important	Critical
Anticipate problems before they happen.	Important	Important	Critical	Very important
Tackle demanding goals with enthusiasm	Important	Important	Critical	Very important
Set priorities with a proper sense of urgency and importance	Important	Important	Critical	Very important
Take initiative	Very important	Important	Critical	Very important
Be confident	Very important	Important	Very important	Critical
Confront difficult issues objectively and non-emotionally	Very important	Important	Very important	Critical
Hear, understand and follow directions.	Very important	Important	Very important	Critical
Accept and provide feedback constructively and considerately	Very important	Important	Very important	Critical
Develop, revise, adjust, and implement a plan	Very important	Critical	Important	Very important

Source: Researcher.

The next step was to determine the level of consensus between the panel members by determining inter-rater reliability. Consistency in participants' scores would indicate:

- whether the second round of evaluations would be necessary for panel consensus; and
- the reliability of the ranking of the soft skill behaviours for inclusion in the soft skill framework.

The collected data were deemed non-parametric of nature. Hence, the non-parametric test for K-related samples was used to determine the Kendall coefficient of concordance (W) to indicate the degree of consensus between panel members. The round one W coefficient of concordance between the panel members, at a 95 % confidence level, reported at 0.598, which indicates very low consensus between the rankings of the panel members and the need for a second round of ranking.

6.3.4 Degree of Panel Consensus after Round 2

A second telephonic round of panel discussions was conducted to derive greater consensus on the items with no consensus. Feedback was provided to the judges on the differences between them. The panel derived consensus with regard to the following:

- The emotional intelligence (25 items) and social intelligence (19 items) behaviours needed to be ranked as very important.
- All safety-related behaviours (six items) should be prioritised as critical behaviours.
- Behaviours related to ethics (four items) need to be re-ranked as critical behaviours.
- The behaviours related to Set priorities with a proper sense of urgency and importance; Tackle demanding goals with enthusiasm; Develop, revise, adjust, and implement a plan; Negotiating responsively; Be confident; and Taking initiative were re-ranked as important.
- Behaviours of Caring about company success and Ability to evaluate future implications of current decisions and actions and work to quality standards were re-rated to very important based on the effect that these behaviours can have on organisational success during the turn-around and stability phase.

A final frequency distribution of the panel members' responses, after the second round, indicated full consensus on 148 (64 %) items and partial agreement on 82 (36 %) items. No items reported full disagreement (see Table 6.20).

A second Kendall coefficient of concordance (W) was conducted to determine if the agreement showed an improvement of the W coefficient of Round 1. The new W coefficient was equal to 0.762, which meets the requirements for concordance of 0.7. The W coefficient indicates that the panel members agreed with one another to a high, yet not super high, degree. As to not frustrate the panel with unnecessary rounds of concordance, the researcher concluded the Delphi process. The findings of the two processes are presented in Table 6.20.

Table 6.20: Concordance of Eskom Panel Members

Delphi	Full Agreement	Partial Agreement	No Agreement	W statistics
Round One	81	135	15	0.598
Round Two	148	82	0	0.762

Source: Researcher.

Finally, the data results of the survey and data results of the Delphi technique were integrated for comparison through triangulation.

6.4 INTEGRATION OF THE SURVEY AND DELPHI METHOD RESULTS

Prior to deriving a draft framework, the data results collected and analysed separately in the quantitative and qualitative methods, were compared and considered through triangulation.

6.4.1 Triangulation of the Critical Behaviours between Respondents and Eskom Expert Panel

A triangulation process was followed to identify differences in views between the quantitative survey results and those of the Eskom expert panel members. The behaviour of Meet deadlines was identified by the sample as a critical behaviour. However, the expert panel did not consider the behaviour as critical. This indicates that the behaviour is of value on the operational side of the business where meeting deadlines is an important aspect of daily activities. However, the Eskom panel added four additional soft skill behaviours to the critical list of Work to quality standards, Deal with people, problems and situations with honesty, integrity, and personal ethics, Promote and encourage others to keep up-to-date with the rules, structures, decision-making bodies of the organisation, and Ability to evaluate future implications of current decisions and actions.

These added skills highlight the experts' holistic view of the current focus areas of Eskom, namely quality work, governance, ethical behaviour, and holistic decision-making. The results are presented in Table 6.21.

Table 6.21: Comparison of Critical Behaviours between Eskom Panel and Respondents

Critical behaviours – Eskom Panel Members	Critical behaviours – Respondents
Comply with all environmental policies and legislation	Comply with all environmental policies and legislation
Comply with policies, directives and procedures	Comply with policies, directives and procedures
Drive safety consciousness in workplace.	Drive safety consciousness in workplace.
Drug free	Drug free
Honesty in actions	Honesty in actions
Know and respect the code of conduct and values of the organisation.	Know and respect the code of conduct and values of the organisation.
	Meet deadlines
Personal integrity	Personal integrity
Raises compliance, ethical or other issues to protect the reputation and obligations of the organisation.	Raises compliance, ethical or other issues to protect the reputation and obligations of the organisation.
Take care of others' safety	Take care of others' safety
Take care of your personal safety	Take care of your personal safety
Uphold the ethics and values of the company and workplace.	Uphold the ethics and values of the company and workplace.
Work to quality standards	
Deal with people, problems and situations with honesty, integrity and personal ethics	
Promote and encourage others to keep up to date with the rules, structures, and decision-making bodies of the organisation	
The ability to evaluate future implications of current decisions and actions.	

Source: Researcher.

Thus, it can be concluded that the determined soft skill behaviours are supported by Eskom subject matter experts, which in turn renders content validity to the mixed-method measurement scale.

In the next section, the final question will be answered by means of a triangulation process.

Do the subject matter experts agree with the importance ranking of the determined soft skills?

6.4.2 Triangulation of Ranking of Importance of the Soft Skills Required by Eskom

The aim of the triangulation exercise was to answer the following overarching research question: Which soft skills competencies will satisfy Eskom employability criteria for graduate interns?

This was conducted by ranking the primary soft skills by using the overall mean of the soft skill behaviours in each soft skill category. The ranked soft skills are presented in Table 6.23, ranging from most important (Rank 1) to least important (Rank 15) as adjusted by the Eskom panel members during the two-round consensus process.

Similarity in opinion was found between the views of the Eskom Panel and the quantitative respondents on the primary skill of Problem-solving. Both groups ranked the skill as equally important and placed it in the ninth ranked position.

Notably, Governance, Compliance, and Ethics were ranked as the most important skills, followed by Ensure zero harm in the view of the Eskom panel members. However, the quantitative respondents considered Ensure zero harm as the most important soft skill, while Governance, Compliance, and Ethics in Eskom represented the second-highest rank. Given the devastating consequences of state capture and corruption during the past decade for Eskom as an organisation, it is no surprise that this skill would be the primary focus area for employability in Eskom.

While the Eskom respondents ranked Team participation as the least important skill, the Eskom expert panel regarded the same skill as the eighth most important skill. The ranking by the panel was in line with the critical skill requirements for the 4IR.

The range between the highest-ranked soft skill competency, Zero harm (4.98), and the lowest-ranked soft skill competency, Team participation (4.49), of the quantitative respondents is negligible at 0.51. The small range indicates the high value attributed by the sample to all the soft skill competencies and associated behaviours. The same scenario is not applicable to the Eskom panel members. The range between the highest and lowest skills is 1.44, which indicates more defined opinions.

While a higher degree of differences was found in the ranking of the soft skill behaviours between the two groups, categorising of the behaviours into primary skill groups showed an interesting phenomenon. Considering the top ten skills, nine of the primary quantitative skills were also in the top ten primary skill list of the Eskom expert panel. Thus, near-perfect consensus was obtained between the two groups as to the most important ten skills required for intern employability.

Notably, the overall sequence of the top five skills ranking of importance by both groups indicated the importance in terms of the greater good (Ensure zero harm), then organisational success (Governance and Performance) followed by what makes the intern great in the organisation (Self-management and Self-development). This indicates a balanced view in terms of development focus,

By means of triangulation, as shown in Table 6.22, it was found that the judges did not agree with the sequence of important rankings allocated by the respondents. Accordingly, the Eskom panel ranking was used to reflect the importance of the Eskom soft skill requirements in the final framework in terms of the sequence of focus areas.

Table 6.22: Triangulation of Soft Skill Behaviours in Terms of their Soft Skill Categories

Theme	Quantitative Sample Data		Delphi Eskom Panel Experts	
	Mean	Rank	Mean	Rank
Ensure zero harm	5.075	1	5.75	1
Governance	4.975	2	5.73	2
Performance	4.709	6	4.86	3
Self-management	4.692	7	4.82	4
Self-development	4.783	3	4.82	5
Decision-making	4.725	5	4.74	6
Analytical	4.690	8	4.63	7
Team Participation	4.481	16	4.63	8
Problem-solving	4.612	10	4.63	9
Innovation	4.614	9	4.61	10
Communication	4.607	11	4.57	11
Resilience	4.500	15	4.38	12
Adaptability	4.566	13	4.33	13
Continuous improvement	4.547	14	4.30	14
KnowYBusiness	4.592	12	4.29	15

Source: Researcher.

6.5 TRIANGULATION OF RESEARCH RESULTS AND 4IR SOFT SKILL REQUIREMENTS

The determined Eskom soft skills were evaluated against the top 10 4IR skill requirements presented in scholarly works for both the years 2020 and 2030 to test alignment. Where soft skills could not be linked directly to the literature terminology use to direct 4IR skills, alignment was sought through the soft skill behaviours linked directly to the Eskom soft skills. All soft skill groups could be linked to the 4IR soft skill lists, as presented by the World Economic Forum (2017) and the McKinsey Global Institute (2018:7) and presented in Table 6.23.

The soft skill Ensure zero harm was linked to Social responsibility through the behaviour ‘the ability to evaluate future implications of current decisions and actions’.

Similarly, the soft skill KnowYBusiness could be linked to the 4IR soft skill Continuous learning through the behaviours of ‘Understand the needs of internal and external customers’ and being ‘Aware of how external environment influence the organisation’. The dynamic and continuous market change, together with the megatrend influences, demand that employees be informed continuously on the market demand and environmental status that would direct their decision-making (Fahnert, 2015).

Table 6.23: Eskom Soft Skill Competency Need versus the Fourth Industrial Revolution requirements

Eskom Soft Skills	Eskom determined Soft Skill Behaviours	4IR 4.0 skills need	4IR 5.0 skills need
Ensure Zero Harm	The ability to evaluate future implications of current decisions and actions.	Social Responsibilit y	Social Responsibility
Governance, Compliance and Ethics	Personal integrity and Honesty in actions Uphold the ethics and values of the organisation and workplace.	Ethical decision-making	Ethical decision-making
Self-Development	Prioritise self-development to enhance competencies, knowledge, and skills. Be willing to continuously learn	Continuous learning	Continuous learning
Decision Making	Enable rational judgment by analysing information and data Make decisions that takes into account all aspects and components Consider a wide range of alternatives and their consequences prior to making a decision	Judgement and decision-making	Systems-thinking
Performance drive	Responds to and anticipates client needs in a timely, professional, helpful and courteous manner Clearly show clients that their perspectives are valued. Strive to consistently meet service standards.	Service Orientation	Service Orientation
Analytical	Break down processes into its component activities. Break information into component parts to see relationships and patterns. Distinguishes between critical and irrelevant pieces of information.	Critical Thinking	Systems-thinking
Self-Management	Understands the reason behind, or motivation for own actions. Aware of impact of own actions	Emotional Intelligence	Emotional and Social skills
Innovative	Come up with innovative ideas Develop practical, creative and innovative solutions to problems Being resourceful	Creativity	a. Creativity b. Initiative
Problem Solving	Apply problem solving strategies across a range of areas. Considers problems from all perspectives Find the true cause of problems before acting. Ability to confront people problems to resolve conflicts in a constructive manner	Complex problem-solving	Systems thinking
Communication	Maintains continuous, open, and consistent communication with others.	Communicati on	Communicati on
KnowYBusines s	Understand the needs of internal and external customers. Aware of how external environment influence the organisation.	Continuous learning	Continuous learning
Adaptability	Adapt to requirements that are changing. Adapt to new ideas and initiatives relevant to own area of work. Respond constructively to change	Cognitive Flexibility	Adaptability
Continuous Improvement	Seek better ways to do things. Proposes ways to do things differently Share learnings with peers	Continuous learning	Continuous learning
Resilience	Capacity to deal with competing work demands/challenges. Remains objective when facing criticism In a positive manner handle rejection on a personal level	Emotional and Social Skills	Emotional and Social Skills
Team participation	Working across different ages irrespective of gender, race, religion, or political affiliation. Negotiating responsively, Perceive and understand the feelings and attitudes of others. Ability to lead others. Understand others' complex or underlying needs, motivation, emotions or concerns. Respect others.	Emotional and Social Skills, Negotiation Interpersonal Empathy, People management, Leadership and Management, Coordinate with others	

Source: Study results compared with the works of World Economic Forum (2017) and McKinsey Global Institute (2018:7).

Key aspects of the Continuous Improvement process are the continuous learning of individuals and organisations. Learning occurs as both an input factor as well as a result of the improvement process (Boer, Berger, Chapman & Gertsen, 2017). Subsequently, the soft skill Continuous improvement could also be linked to the 4IR skill of Continuous learning through the linked behaviours of Seek better ways to do things, Proposes ways to do things differently and Share learning with peers.

To recapture, Resilience is a critical 4IR competency (Forsythe, 2017) as it allows employees the ability to bounce back in adverse and conflict situations (Luthans, 2002) and perseverance during workplace changes (Tomlinson, 2017). Accordingly, Resilience could be linked to emotional and social skills through the behaviours of Capacity to deal with competing work demands/challenges. Remain objective when facing criticism, and on a positive manner handle rejection on a personal level. The remainder of the Eskom soft skills could be linked directly to the 4IR critical soft skill requirements.

By evaluating the behavioural elements of the determined soft skills, it can be concluded that the Eskom-determined soft skills align with the soft skill requirements of the 4IR, as stated in literature. Thus, the Eskom-determined soft skills would support the endeavours of the organisation to turn around and stimulate financial sustainability.

In summary, the empirical research results and the theoretical framework guiding the study can be consolidated as presented in Figure 6.21.

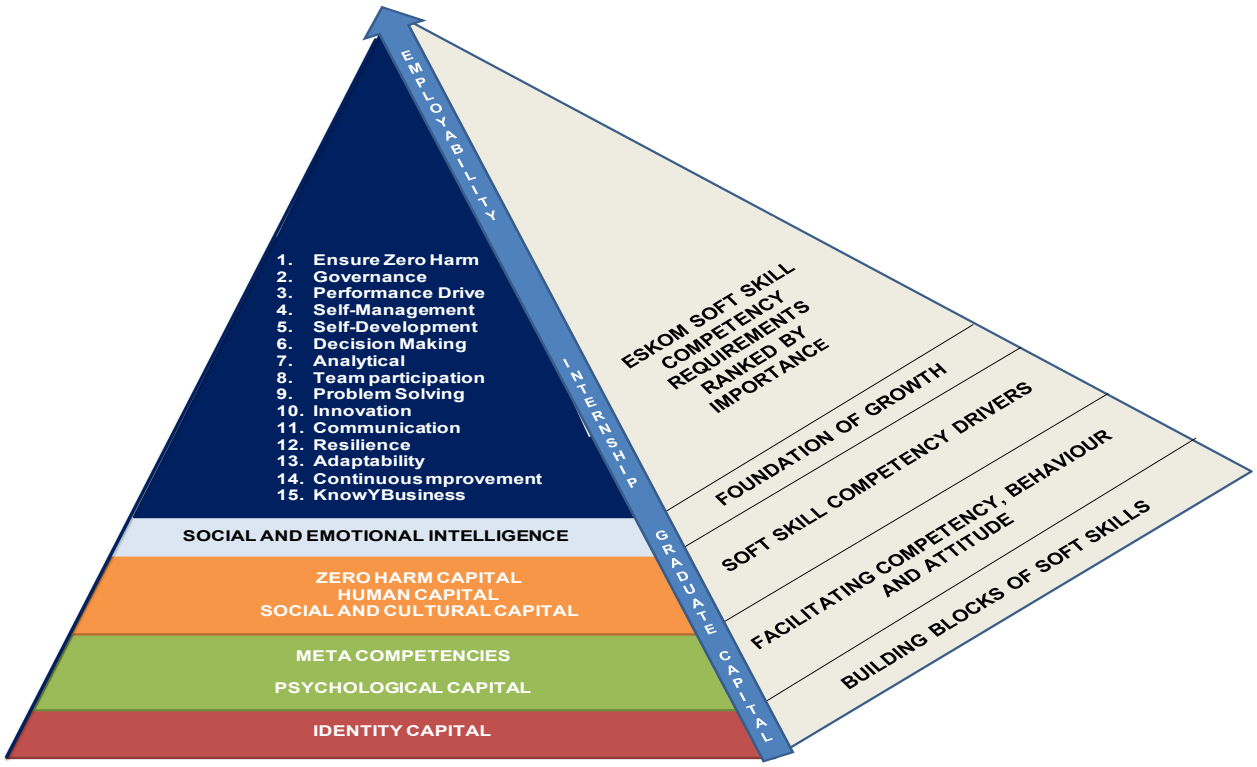


Figure 6.21: Integrating research results and theory

Source: Researcher.

The integrated view presents the researcher with the tool to derive the determinants of the framework that ultimately support the proposed soft skill competency framework.

Concise summary of information to be incorporated in the soft skills competency framework:

Determination 1: All the soft behavioural skills should be included in the framework with their associated soft skills.

Determination 2: Include the determined 15 soft skills competencies that will satisfy employability criteria for graduate interns in Eskom.

Determination 3: The ranking of the 15 soft skills can guide leadership focus in scheduling the sequence of soft skill development.

The following challenges have been identified and will need to be addressed in the framework:

- Disrespectful behaviour.
- Non-conducive working environment for intern development.
- Leadership trust and commitment to intern development.
- Leadership commitment.

The challenges will be examined further for solutions in section 7.2.3.

The next chapter turns to the development and validation of a proposed soft skill competency framework.

6.6 CONCLUSION

While chapter 5 described the research method and design that were followed in executing the design, Chapter 6 presents conclusions on the primary research question following empirical investigation and statistical analysis to:

- determine the soft skill employability competencies required by Eskom; and
- test if subject matter experts in Eskom support the determined soft skill competencies.

Chapter 7 presents the process and inferential findings used to determine the soft skill competency framework.

Chapter 8 will summarise the research questions and conclude the study. The significance of the study will be highlighted, limitations will be discussed, and recommendations will be made.

CHAPTER 7

TOWARDS A SOFT SKILL COMPETENCY FRAMEWORK

Chapter 6 represented the analysis and triangulation of the data collected in the mixed-method and Delphi processes. Firstly, the soft skill competency behavioural needs of Eskom were determined, and secondly, validation was obtained from an Eskom expert panel for the derived soft skill competency behaviours to be included in a soft skill competency framework.

7.1 INTRODUCTION

The objective of Chapter 7 is to satisfy the primary objective of the study to develop a soft skill competency framework to enhance intern employability in Eskom.

The aim of the proposed soft skill competency framework was to assist in enhancing learners' employability through work-integrated learning initiatives. A secondary purpose was to present a framework that would be understandable in lay terms to its audience – be it interns, trainers, curriculum developers, supervisors, or managers. It needs to be noted that the development of the framework is not for academic purposes, but for application in an operational environment; accordingly it presents its own language and simplicity in relation to that environment.

Once the proposed framework had been developed, it was presented to an academic panel of subject matter experts for evaluation. The following section determines the relationships between the main elements derived.

7.2 PROPOSING AN INTEGRATED FRAMEWORK

In addressing the primary objective, the secondary research questions were used to provide the information required in developing the framework. Chapter 2 provided an overview of employability, its development, environment, role players, and importance for organisational success, – especially during the 4IR. Chapters 3 and 4 provided the information to derive the theoretical framework (see section 4.6) that guided the empirical research. Chapter 3 discussed the capital elements that constitute intern employability capability and its role in deriving competency to be deemed employable. Chapter 4 conceptualised soft skills and identified theoretical shortcomings in the form of zero harm capital.

In Chapter 5, the theoretical framework was used to derive an appropriate measuring instrument to determine the soft skills required by Eskom to enhance intern employability. Chapter 6 presented the results of the empirically study and concluded on the soft skills Eskom require from interns. Challenges that might interfere with the development process of soft skills were established. In this chapter, a

framework is proposed that was presented to academic specialists in the area of application to provide recommendations to enhance the initial framework.

In the section that follows, the theoretical framework derived (see section 4.6), soft skills, graduate capitals, and challenges identified in Chapter 6 are used to propose an integrated soft skill competency framework to address intern employability. For the purposes of the framework, only the primary soft skills were included in the framework. One of the primary requirements of the framework was that it would enable supervisors and interns to determine the potential skills gaps that needed to be closed through training interventions. Accordingly, each soft skill was linked to its sub-skills category and soft skill behavioural competencies as an addendum to the framework (Appendix K).

7.2.1 Establishing the Facilitators of Soft Skill Competency of Interns

Emotional and social intelligences as well as PsyCap have been proposed as facilitators in development of competency soft skills. The following three sections will test the relationships (correlation) and influences (regression) of these elements with the determined soft skills (see 4.6).

7.2.1.1 Emotional intelligence as facilitator of soft skill competency

EQ relates to how the individual feels and considers the self as well as other humans. It plays a significant role in attitudes, beliefs, and performance. Correlation and regression analyses were made to determine the relationship of EQ with and its influence on the soft skills (see results in Table 7.1).

Table 7.1: Correlation and Regression Results of Emotional Intelligence and Soft Skills

Regression Analysis: Emotional Intelligence as predictor of:	**Alpha = 0.05**			
	R	Adjusted R Square	Standard Error	p-value
Self-management	0.878	0.770	0.270	0.0000
Continuous Improvement	0.814	0.662	0.420	0.0000
Performance	0.798	0.636	0.436	0.0000
Team Participation	0.789	0.621	0.445	0.0000
KnowYBusiness	0.770	0.592	0.461	0.0000
Communication	0.761	0.578	0.469	0.0000
Innovation	0.761	0.577	0.470	0.0000
Problem-solving	0.753	0.565	0.476	0.0000
Analytical	0.750	0.561	0.479	0.0000
Decision-making	0.749	0.560	0.479	0.0000
Adaptability	0.742	0.549	0.485	0.0000
Resilience	0.729	0.530	0.495	0.0000
Self-development	0.663	0.437	0.424	0.0000
Governance	0.629	0.394	0.562	0.0000
Zero Harm	0.599	0.356	0.580	0.0000

Source: Researcher.

The Pearson correlation coefficients between EQ and Governance, Ensure zero harm, and Self-development had positive, moderate linear relationships at an alpha of 0.05. The remaining soft skills had strong, positive linear Pearson correlation coefficients of $0.728 < r < 0.879$. The high correlation between EQ and self-management indicates the criticality of EQ in establishing a conducive working environment.

The adjusted R Square values for all soft skills were at $0.355 < r^2 < 0.771$. The adjusted r^2 indicates that EQ explains from 35.6 % up to 77 % of the variance in soft skills. An r^2 value above 25 % is deemed significant (Heiman, 2001). Accordingly, a small increase in EQ will have a major effect on self-management, with 77 % of self-management explained by EQ. In contradiction, the same increase will have a smaller effect on soft skills with a lower r^2, for example, Governance and Ensure zero harm. The standard error (SE) reflects values smaller than 0.581, indicating little deviation from the mean variances of the soft skill. The regression analysis indicates that EQ had a strong and significant influence on competency in soft skills (p-value < alpha). Enhancement of interns' EQ will support competency enhancement of all the stated soft skills. This confirms the scholarly views that EQ can facilitate transfer of competency to soft skills within work-integrated learning workplace environments (Bar-on, 2006; Jackson, 2013; Navas et al., 2018; Smith, 2012). Thus, EQ is regarded as both a facilitating agent and an outcome in the form of a soft skill.

7.2.1.2 Social intelligence as facilitator of soft skill competency

Social intelligence directs the individual's behaviour when interacting with other individuals. The Eskom panel highlighted the importance of social intelligence as critical. This view is based on the adverse effect that a lack of this intelligence can have on relationships between individuals, stakeholders, and customers. Accordingly, statistical analysis was employed to determine the relationship of SQ with the soft skills and if enhancement of SQ would indeed increase competency in the soft skills.

The Pearson correlation indicates a strong, positive association between social intelligence (SQ) at an alpha of 0.05 with $0.712 < r < 0.981$. A high correlation with all the soft skills was found, but in particular with Team participation and Self-management

The adjusted R Square values for all soft skills were at $r^2 < 0.507$, indicating that SQ will affect at least 50 % of the variance of any soft skill. In fact, SQ will affect up to 98 % of the variance of Team participation, indicating that even a small increase of SQ will have a significant and dramatic effect on team participation. This also indicates that the workplace environment might be affected significantly by SQ. The standard error (SE) indicated values smaller than 0.581, indicating little deviation from the mean variances of the soft skills. Enhancement of interns' SQ will support competency enhancement of all the stated soft skills. This confirms the scholarly views that SQ can facilitate transfer of competency to soft skills in work-integrated learning workplace environments.

The high correlation of social intelligence with Team participation and Self-management emphasises the roles that good relations, esteem, awareness, and efficacy play during social interactions. Teamwork is highlighted in performance and organisational success. Similarly, the sharing of information between interns and employees would enhance the knowledge of interns and support innovative ideas. Overall, the value of social intelligence in establishing a positive working environment and support organisational success is indicated.

The regression analysis indicates a strong and significant effect of SQ on the soft skills with the p-value < alpha. This confirms scholarly views that SQ facilitates transfer of capability to soft skill actions and competencies in work-integrated learning workplace environments. Thus, SQ is deemed both a facilitating agent and an outcome in the form of a soft skill.

The statistical values presented above are indicated in Table 7.2.

Table 7.2: Correlation and Regression Results of Social Intelligence and Soft Skills

Regression Analysis: Social Intelligence as predictor of:	**Alpha = 0.05**			
	R	Adjusted R Square	Standard Error	p-value
Team participation	0.980	0.961	0.126	0.0000
Self-management	0.910	0.828	0.233	0.0000
Communication	0.884	0.781	0.283	0.0000
Performance	0.872	0.759	0.281	0.0000
KnowYBusiness	0.850	0.722	0.381	0.0000
Resilience	0.849	0.721	0.325	0.0000
Problem solving	0.827	0.682	0.383	0.0000
Self-development	0.827	0.682	0.383	0.0000
Continuous improvement	0.820	0.672	0.375	0.0000
Governance	0.806	0.649	0.342	0.0000
Analytical	0.794	0.630	0.376	0.0000
Decision-making	0.759	0.575	0.444	0.0000
Adaptability	0.752	0.564	0.477	0.0000
Innovation	0.752	0.565	0.437	0.0000
Ensure zero harm	0.713	0.507	0.480	0.0000

Source: Researcher.

In the next section, PsyCap was considered as facilitator of soft skill competency.

7.2.1.3 PsyCap as facilitator of soft skill competency

Psychological capital predicts work attitudes and behaviours. The function of PsyCap is to facilitate the acquisition of the functional, cognitive, and social competencies associated with behaviour and attitude (Avey et al, 2010). It was also found that it contributes significantly to excellence in organisational and individual performance (Luthans et al., 2010). The OCB aspect encompassed in PsyCap assists interns

to go the extra mile and abide by the values and ethical expectations of the Eskom Business Code of Conduct and values In addition, PsyCap capability enables interns to adapt to the workplace environment and, where necessary, have the resilience to manage adversity, conflict, and failure positively (Chinomona & Mofokeng, 2017).

The Pearson correlation results indicate a strong, positive association between PsyCap and all the soft skills at an alpha of 0.05. The highest associations are reported for Performance, Self-management and Team participation.

The regression analysis indicates that PsyCap has a significant effect on all the related soft skills with a p-value < alpha. This is supported by an extremely high adjusted R square ($0.529 < r^2 < 0.885$), which suggests that an enhancement of PsyCap will have a significant effect on competency in the stipulated soft skills. Possessing PsyCap capabilities will enable interns to survive the turn-around of Eskom as an organisation and the way forward to recovery.

Table 7.3: Correlation and Regression Results of PsyCap and the determined soft skills

Regression Analysis: PsyCap as predictor of:	**Alpha = 0.05**			
	R	Adjusted R Square	Standard Error	p-value
Performance	0.940	0.884	0.195	0.0000
Self-management	0.927	0.859	0.211	0.0000
Team participation	0.913	0.834	0.260	0.0000
Communication	0.890	0.792	0.276	0.0000
Problem solving	0.869	0.755	0.337	0.0000
KnowYBusiness	0.865	0.748	0.363	0.0000
Innovation	0.864	0.746	0.334	0.0000
Analytical	0.863	0.743	0.313	0.0000
Decision-making	0.835	0.697	0.375	0.0000
Continuous Improvement	0.835	0.697	0.375	0.0000
Governance	0.788	0.620	0.356	0.0000
Ensure zero harm	0.729	0.530	0.469	0.0000

Source: Researcher.

The next step was to consider the association between soft skills and individual employability capital.

7.2.2 Considering the Capital Drivers of Intern Soft Skill Competency

It is important to consider each of the capitals' roles in intern soft skill competency enhancement. Knowledge of the role assisted in understanding the flow, importance and priority of each capital in the development process of the intern. Using the theoretical framework derived in section 4.6, the soft skills were linked to their respective employability capital, as presented in Table 7.4.

Table 7.4: Linking the Soft Skills and their Sub Skills to Employability Capital

Soft Skill	Sub Skill	Capital
Adaptability		PsyCap
Analytical		Human
Communication		Social capital
Continuous improvement		PsyCap
Decision-making		Human
Innovation		Identity
KnowYBusiness		Identity
Problem solving		PsyCap
Resilience		PsyCap
Self-development		PsyCap
zero harm		Zero Harm
Governance	Compliance with rules	Identity
	Ethical conduct	Identity
Performance drive	Apply self	Identity
	Commitment	PsyCap
	Customer care	Social capital
	Planning	Identity
Self-management	Manage emotions	Identity
	Responsible behaviours	Identity
	Self-awareness	Identity
	Self-belief	Identity
	Self-Motivation	Identity
Team participation	Diversity management	Social
	Emotional intelligence	Social
	Social intelligence	Social
	Team contribution	Social

Source: Researcher.

The next section discusses each capital as a competency driver for intern soft skills, commencing with human capital.

7.2.2.1 Human capital as a competency driver for soft intern skills

Human capital is regarded as the driver of the soft skills. The Pearson correlation indicates a strong, positive association between Human Capital with an alpha of 0.05, with 0.701 < r < 0.940 (see Figure 7.1). A very high correlation (> 0.80) is reported for nearly all soft skills, notably for 'the soft skills like resilience and adaptability. Interestingly, the association of human capital with self-development shows the lowest association. This might indicate that learning from peers and informal interactions might be of more value than formal knowledge is while enrolled in an internship.

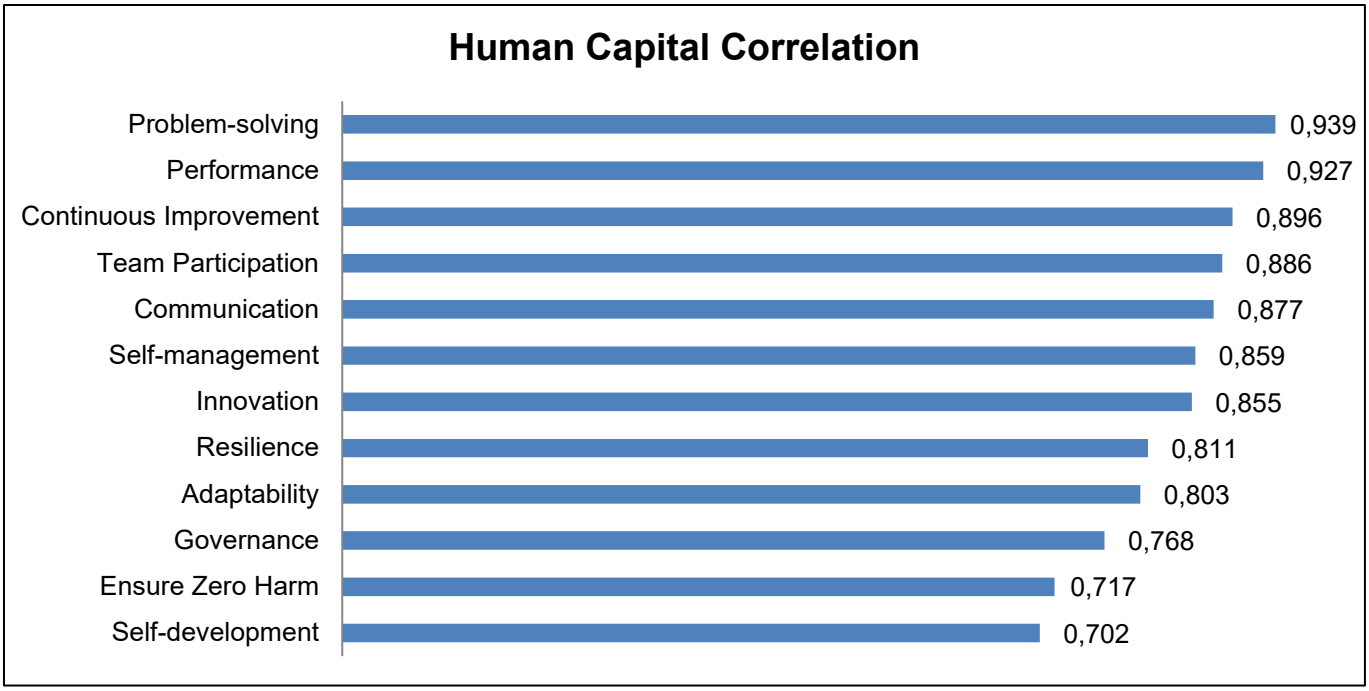


Figure 7.1: Association of human capital with the developed soft skills

7.2.2.2 Identity capital as a competency driver for soft intern skills

Identity capital involves the building blocks of soft skill development and represents the personal emotional, functional competencies of an individual (see section 3.3.2). It considers the concepts of personality, locus of control, directs self-esteem, self-efficacy, awareness and self-management. The soft skill Governance, rated as critical by the survey sample and Eskom experts, is also encompassed by ethical behaviour, integrity, and values. Another 4IR skill, innovation, and creativity also resort within this capability. Together, the capabilities of identity capital form the basis for performance and excellence in the workplace.

The Pearson correlation indicates a strong, positive association between identity capital and all the soft skills at an alpha of 0.05, with 0.766 < r < 0.939 (see Figure 7.2). The strongest relationship, namely with Team participation, emphasises the importance of the essence of a human in the interaction with other individuals in the workplace. Extraverts often perform at their best within team interactions.

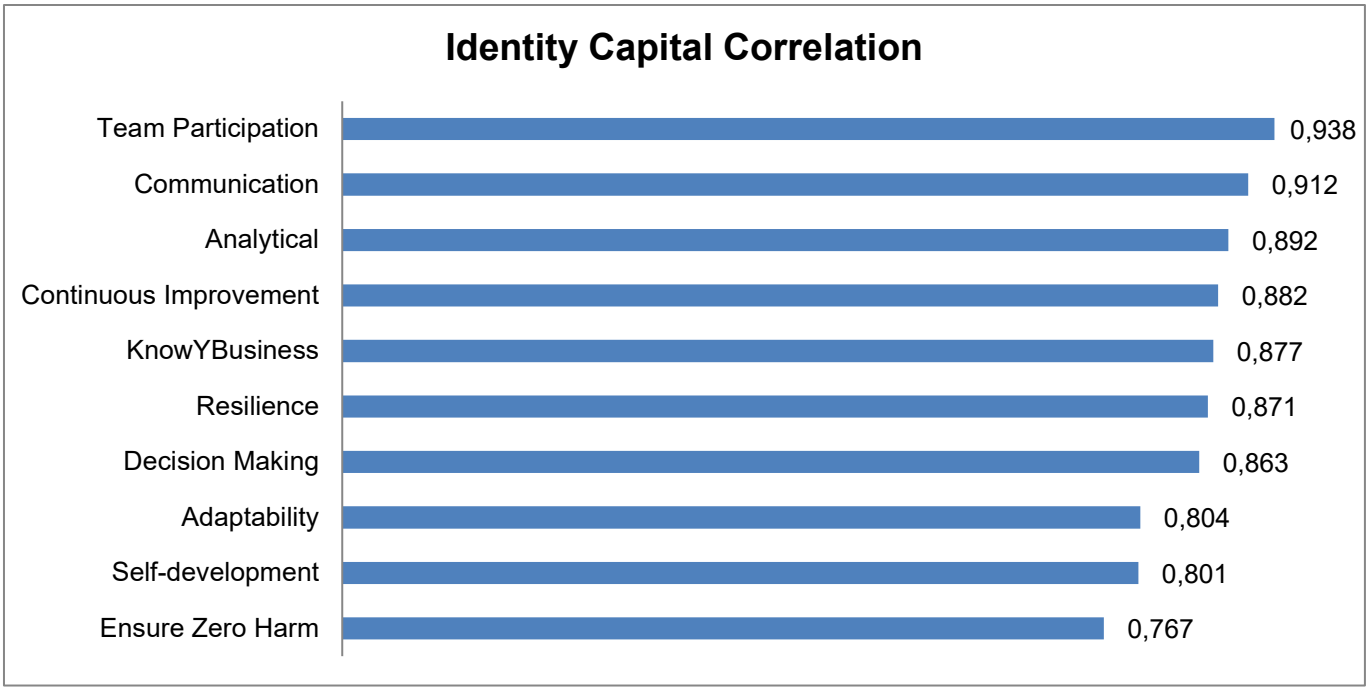


Figure 7.2: Association of identity capital with the developed soft skills

7.2.2.3 Zero harm capital as a competency driver for soft intern skills

Zero harm capital is a newly derived form of capital and is presented as a driver of soft skill competency behaviours related to workplace safety and eco care. The associations between the soft skills of ensuring zero harm, social intelligence, PsyCap, human capital, and identity capital presented as strong, positive relationships. In addition, zero harm capital had strong relationships with the five soft skills of Governance, Self-management, Performance, Team participation, and KnowYBusiness at an alpha of 0.05, with $0.711 < r < 0.768$. The remaining ten soft skills show a moderate relationship with zero harm capital. As the top five skills are linked to identity, social and human capital, a separate capital for measuring ensuring zero harm is validated. Figure 7.3 presents the relationship spread. It is expected that, as zero harm capital is developed further in future research, the relationship strengths will increase.

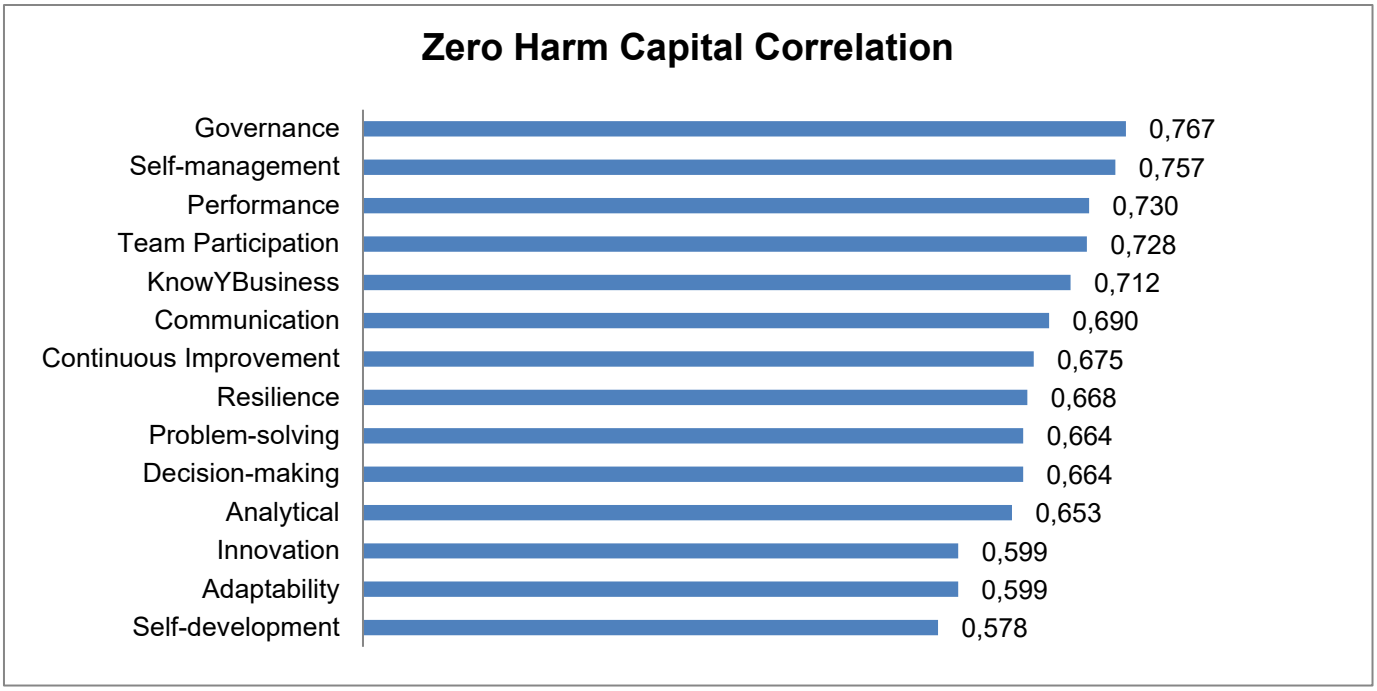


Figure 7.3: Association of Zero Harm capital with the developed soft skills

7.2.2.4 Social capital as a competency driver for soft intern skills

Similar to the previous discussed forms of capital, social capital is a driver of soft skill competency. As a reminder, social capital defines the interrelationships between humans in the workplace and employability potential (Hinchliffe et al., 2011). Social capital is indicated as critical elements in support of organisational survival during the 4IR (McKinsey Global Institute, 2018; World Economic Forum, 2017). As indicated previously, the social capital dimensions are located within the socially constructed emotions derived from acceptance, evaluation, comparison, and efficacy, which are initiated through self-awareness, relationships, and networks with others.

The Pearson correlation indicates a strong, positive association between social capital and all the soft skills at an alpha of 0.05, with $0.737 < r < 0.939$ (see Figure 7.4). Interestingly, social capital had the strongest relationship with performance. Notably, the criticality of performance during the 4IR to gain a competitive advantage will highlight the requirements of networking and collaboration to combat market competitiveness (Batistic & Tymon, 2017). Similarly, employees' need for self-efficacy and real-time market knowledge supports the high relationship between the capital, self-management, and KnowYBusiness.

The need for continuous improvement in product mix and services will support turn-around initiatives of Eskom. In addition, Eskom will need to find optimal solutions for current challenges in terms of load availability and poor customer services. A critical aspect highlighted by the observed association is that

Eskom will need to re-establish trust and confidence with its customer base – alternatively, no amount of performance will support the sustainability of the organisation.

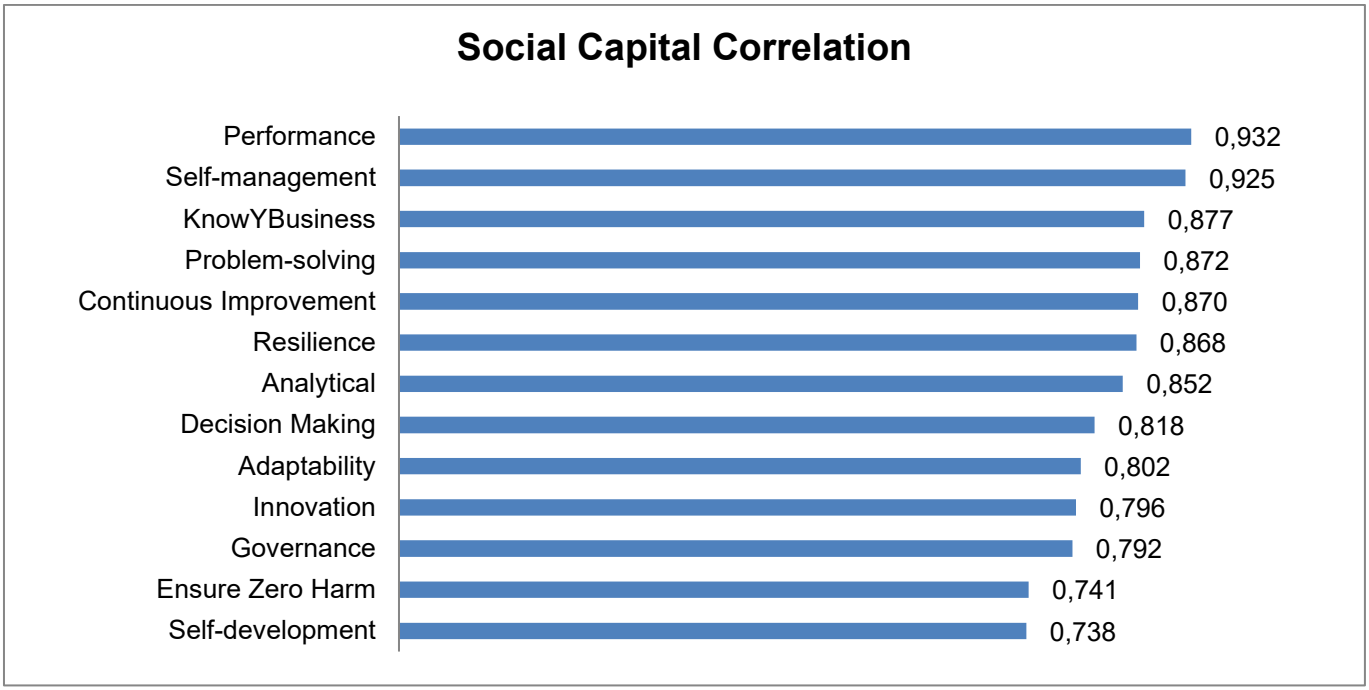


Figure 7.4: Association of social capital with the developed soft skills

7.2.2.5 Cultural capital as a competency driver for soft intern skills

In an ever-increasing globalised world and market trade, cultural capital has become a significant driver of organisational success and workplace efficiency. The individual's ability to sense, adjust, reason, and act suitably on cultural signals in the workplace and across the customer and stakeholder base, demands cultural capabilities (Ng, Van Dyne & Ang, 2019). The concept holds that awareness of cultural diversity in development and the ability to cross cultural borders improve workplace cohesiveness significantly.

When the Pearson correlation test is applied, cultural capital indicates a strong, positive association with the majority of the soft skills and a moderate association with the remaining skills at an alpha of 0.05, with $0.658 < r < 0.843$ (see Figure 7.5). As expected, cultural capital shows the highest association with team participation, as in this domain, cultural capital establishes either a dysfunctional environment or one of excellence. The second highest correlation is reported with regard to self-management, which highlights the criticality of self-control not only during cultural interactions but also in the daily interaction with peers and supervisors.

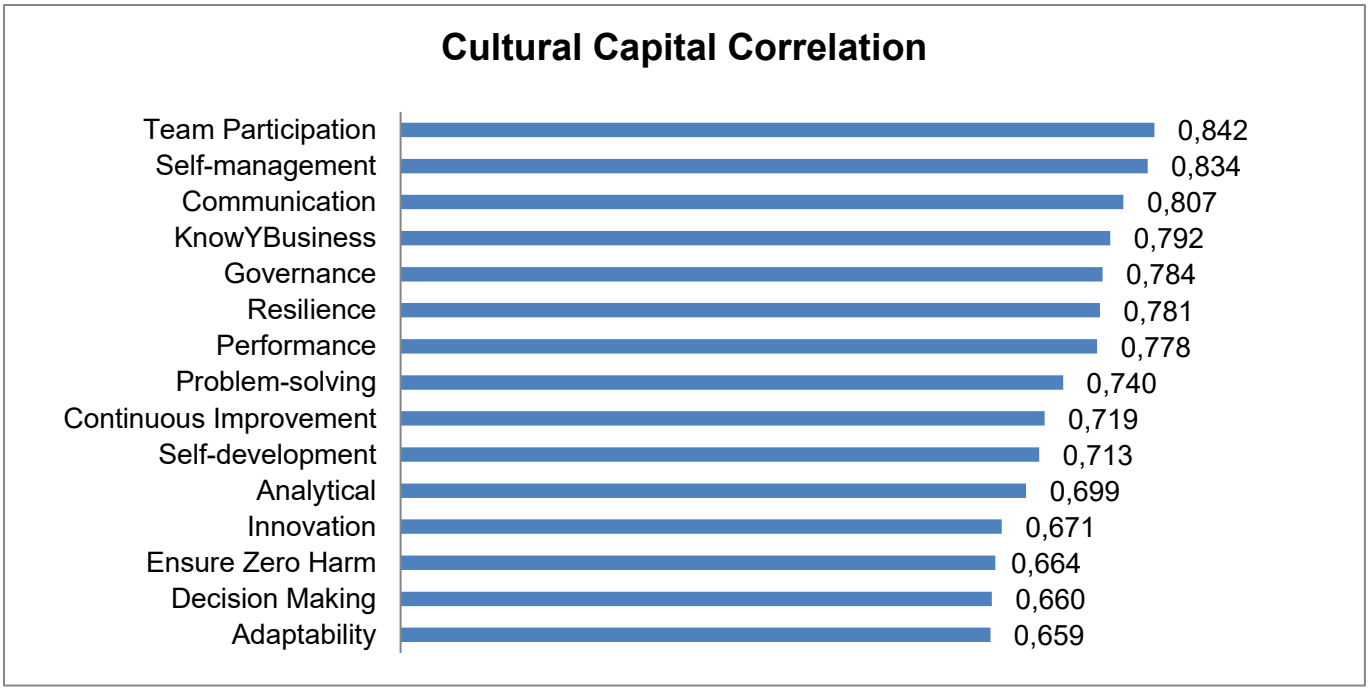


Figure 7.5: Association of cultural capital with the developed soft skills

Similarly, communication – legal and otherwise – requires special attention, as Eskom concludes various cross-border contracts and collaborative agreements. Understanding the culture of the role players, the versatility and performance, as well as the communication requirements, will support performance in such a diverse workplace environment significantly (Ang et al., 2006). As experienced in Eskom and Transnet, governance becomes extremely important during cross-cultural transactions; – therefore, substance was found for the strong relationship between cultural capital and governance.

In Eskom, diversity management has been incorporated in the Business Code of Conduct and value system. The intern will need to understand that acceptance of diversity in the workplace is critical in Eskom. Discrimination in any form is not tolerated. Should interns fall short of expectations regarding diversity management, they will not be considered for employability.

7.2.3 Consideration of the Challenges Raised in Chapter 6

7.2.3.1 The challenge of disrespectful behaviour

Respect has been raised excessively as an important skill (see 6.2.5.3.1), indicating a potential challenge with current interns. Matthiesen and Einarsen (2015) argue a clear link between hostile workplace behaviours, a lack of self-esteem, and low social intelligence. Disrespect is often presented in subtle nuances, for example, slow responses and demeaning comments. Irrespective of intent, the behaviour is detrimental to workplace cohesiveness and contributes to job dissatisfaction, limited effort, burnout, poor health, and poor performance. Ultimately, disrespect can be observed in organisations' bottom line

(Maslach & Leiter, 2016; Porath & Pearson, 2013). In terms of interns, these elements can be linked to underdeveloped identity and social capital.

Reasons raised for dysfunctional behaviour are a chaotic work environment, organisational changes, pressure, interpersonal clashes, unrealistic work demands, absence of empathy, low morale, organisational climate, and destructive leadership styles (Matthiesen & Einarsen, 2010). A notable research finding in the work of Matthiesen and Einarsen (2015) indicates that perpetrators and victims equally reported higher stress levels relating to unclear expectations and demands surrounding their work output. The workplace environment in Eskom has been affected adversely by poor governance processes and state capture. Conflicting instructions, outside of policy and procedures determination, were at the order of the day in the past few years. Confusion has resulted in low morale and a dysfunctional work climate.

To resolve this unethically generated impasse of disrespect, leadership will have to "model good behaviour" (Porath & Pearson, 2013:118) by practising and living the values and norms of the organisation (Walsh, Lee, Jensen, McGonagle & Samnani, 2018). In fact, Jensen et al. (2018) empirically found that demonstrated organisational values, in terms of respect, promotes positive employee behaviour and decrease disrespectful behaviour in the workplace. Notably, while management may call for respect from interns, research indicates that leaders set the example that promotes the workplace culture (Jurkiewicz & Giacalone (2016).

In line with these scholarly views, a regression analysis was made to determine whether EQ, SQ, and upholding the ethics and values of the company and workplace would offer development solutions for respectful behaviour. At an alpha of 0.05, soft skills and behaviour related to SQ, EQ and upholding the ethics and values of the company and workplace yielded a moderate positive relationship, with $0.501 < r < 653$. However, the p-value of the regression analysis (see Table 7.5) indicates that all three variables have a significant influence on respectful behaviour, with p-value < 0.05.

Table 7.5: Mediating Factors for Respect for Others

Regression Analysis: Will respect for others be mediated by:	**Alpha = 0.05**			
	R	Adjusted R Square	Standard Error	p-value
SQ	0.652	0.424	0.614	0.0000
EQ	0.512	0.260	0.696	0.0000
Uphold the ethics and values of the company and workplace	0.502	0.250	0.701	0.0000

Source: Researcher.

The adjusted R Square values indicate that all three factors explain the variance in respectful behaviours significantly. The standard error (SE) values are smaller than 0.702, indicating little deviation from the mean variances. The outcome supports the mentioned research that, (i) EQ, SQ and being informed of the Eskom Code of Conduct and values will mediate disrespectful behaviour, and (ii) leaders who actively live by example in terms of the Eskom Code of Conduct, Eskom leadership pillars, values and being perceived as ethical will mediate disrespectful behaviour.

7.2.3.2 The challenge of a non-conducive workplace

A critical challenge is posed for organisations when employees/interns become disengaged due to dysfunctional workplace environments. Constant workplace bickering, disrespect, bullying, and poor attitudes from the role players result in drained energy and organisational ineffectiveness. Kahn (1990) argues that such environments are counterproductive for innovation and performance. The environment will cause interns to feel unsafe, meaningless, and distracted. Deci and Ryan (1987) postulate that the responsibility for conducive and supportive working environments falls squarely on the shoulders of management. A study by Anitha (2014) found that the working environment, co-worker relationships and leadership has a significant influence on employee engagement and that engagement, in turn, determines performance and organisational effectiveness. Anitha (2014) emphasises the importance of a conducive and harmonious work environment for organisations. In considering solutions to present such an environment, the researcher turned again to statistical guidance.

A hundred and thirty-four (134) soft skill behaviours were identified from the 15 soft skill and employability capital that could affect the workplace environment if applied negatively or with a negative attitude. The correlation and effect of these behaviours were tested against the variables of Social Intelligence, Emotional Intelligence, Respect for Others and Uphold the ethics and values of the company and workplace. The adjusted R squares indicate the significant effect of the factors in generating a conducive workplace environment.

The alpha value of 0.05, SQ ($r = 0.959$) and EQ ($r = 0.929$) indicated a strong, positive relationship with workplace conduciveness and that the variables had a significant effect on workplace conduciveness with a p-value < 0.05. Respect for others indicated a moderate positive relationship but a significant effect on workplace conduciveness. Similarly, upholding the ethics and values of the company and workplace, would affect the workplace significantly in spite of a moderate relationship with workplace conduciveness (see Table 7.6). Enhancement of social intelligence will increase workplace conduciveness by nearly 92 %. Similarly, an increase in EQ will have a major positive influence on workplace behaviour.

The results also indicate the importance of interns to be respectful and leadership to live the Eskom Business of Conduct, values and the four Eskom leadership brands actively. In addition, the results

support the development of interns and leaders in both EQ and SQ to support an optimal workplace environment.

Table 7.6: Factors Mediating a Conducive Workplace Environment

Regression Analysis: Will workplace conduciveness be mediated by...?:			Alpha = 0.05	
	R	Adjusted R Square	Standard Error (SE)	p-value
Social Intelligence	0.959	0.919	0.163	0.0000
Emotional Intelligence	0.929	0.862	0.212	0.0000
Respect for Others	0.595	0.352	0.461	0.0000
Uphold the ethics and values of the company and workplace.	0.531	0.280	0.486	0.0000

7.2.3.3 Challenges of leadership trust and commitment

Similar to a dysfunctional work environment, distrust and failure of leaders to commit to intern development will have a severe effect on intern development outcomes. Combined, these factors might have been the reason for the low Eskom intern throughput in recent years.

Various scholars, for example Seto and Sarros (2016), Sipe and Frick (2015), and Chmielecki and Sułkowski (2018) propose servant leadership as a facilitator of trust in an organisation and its leaders. The recent research study by Seto and Sarros (2016) confirms the significant relationship between servant leadership and employee trust. This is predominantly due to the specific attributes of servant leaders to motivate, care for, guide, and enhance self-esteem and OCB. In addition, the research holds that the authenticity and stability attribute of servant leaders might build mutual trusting relationships and support adaptability and resilience during organisational changes. Notably, a sincere interest in the development and well-being of an individual encourages trust and enhances OCB. In addition, servant leaders act as role models and create an environment where employees and interns feel appreciated, creativity is valued, and interpersonal growth is encouraged (Van Dierendonck. 2011). Some of the many advantages of servant leaders are that they are committed to their employees, encourage balanced development, empower them, communicate and create a shared vision, keep employees informed during changes of change, and motivate them to go the extra mile for the well-being of the organisation.

Correlation and regression analyses were made to determine the relationship of EQ with the soft skills and its influence on the soft skills (see results in Table 7.7).

Table 7.7: Factors Mediating Trust

Regression Analysis: Will Trust be mediated by...?:	Alpha = 0.05			
	R	Adjusted R Square	Standard Error (SE)	p-value
Social Intelligence	0.779	0.606	0.531	0.0000
Emotional Intelligence	0.719	0.516	0.589	0.0000
PsyCap	0.720	0.516	0.588	0.0000

The Pearson correlation coefficients indicate strong, positive, linear association at an alpha of 0.05 between SQ, EQ, PsyCap, and Trust ($0.719 < r < 0.780$). The adjusted R Square values for the soft skills were $0.515 < r^2 < 0.607$. The adjusted r^2 indicates that enhanced SQ, EQ, and PsyCap have a significance influence on trust. An increase of the SQ, EQ, and PsyCap of interns and managers will support a work environment that is more trusting.

In addition, Eskom states in its Integrated Report (2019:2), "Our leadership brand pillars support our vision, mission, and values." Further to this, Eskom states the following requirements for effective leadership: Create a caring, trust-based environment; Promote collaborative decision making and effective teamwork; and Develop others and enable them to perform at their best. The expectations are clear, and over the past six years, all Eskom leaders have been provided with the tools and training on the pillars of the Eskom Leadership Brand. Accordingly, all leaders are in the position to practise the four pillars of leadership. The factors that would advance a conducive workplace environment are summarised in Figure 7.6.

Figure 7.6: Learning-conducive workplace determinants

Source: Developed by researcher.

The workplace determinants are integrated in the proposed framework in the next section.

Concise summary of information to be incorporated in the soft skills competency framework:

Determination 4: EQ, SQ, and PsyCap facilitate and influence the soft skills.

Determination 5: Human, identity, zero harm, social, and cultural capital are associated with the soft skills.

Determination 6: Respectful behaviour of interns is facilitated by leaders and interns' SQ, EQ, as well as their upholding of the ethics and values of the company and workplace. Leaders should lead by example and by practising the values and Eskom leadership pillars.

Determination 7: A conducive workplace environment can be created by developing both leaders and interns in EQ, SQ and upholding the ethics and values of the company and workplace. Respect will also facilitate a conducive workplace environment.

Determination 8: An effective intern development programme depends on the trust relationship and commitment of management. Trust and commitment can be generated by leader development in SQ and EQ and by employing the leadership brand pillars of (i) leadership with the heart of a servant, (ii) leadership that creates a learning environment, (iii) leadership characterised by good governance, and (iv) leadership characterised by disciplined execution.

In the next section, the integration of the concepts and determinants in developing a proposed framework is discussed.

7.3 INTEGRATING THE CONCEPTS AND DEVELOPING A PROPOSED FRAMEWORK

The analyses and results discussed in the theoretical framework postulated in Figure 4.3 and the results of the foregoing sections provide the guiding considerations applied during the construction of the draft framework. The guiding determinants (sections 6.5 and 7.2.3) for integrating the framework elements are summarised in Table 7.8 as a planning guide for the development of the framework.

The following theoretical concepts guide the framework:

a) The road map of graduate employability commences with the development of human, identity, PsyCap, social and cultural capital. Together, these variables of capital form employability capital (Tomlinson, 2018).

b) Consider the theoretical shortcomings in terms of societal responsibility (Cimatti, 2015; Jackson, 2015; Walker et al., 2017) and include the sub element of zero harm capital in employability capital.

c) Emotional and social intelligence act as facilitators to transfer capability to soft skills competencies (Bar-on, 2006; Jackson, 2013; Navas et al., 2018; Smith, 2012).

d) Psychological capital predicts work attitudes and behaviours (Avey et al., 2010). It facilitates the acquisition of functional, cognitive, and social competencies (behaviour and attitude) (Bandura, 1986; Le Deist & Winterton, 2005; King, et al., 2016).

e) Identity capital involves the building blocks of soft skill development and can be regarded as the personal emotional functional competencies of an individual (Cimatti, 2016; Lewis, 2016).

f) Social and cultural capital, zero harm capital and human capital are regarded as the drivers of soft skill competency behaviours (Serrat, 2017; Tomlinson, 2017; Walker et al., 2017).

g) Consider environmental influences (Clayton et al., 2018; Tomlinson, 2017).

Theory and empirically derived soft skills and behaviours, as well as the factors that support a learning environment, were integrated in a guide, as presented in Table 7.8.

Table 7.8: Guide for Developing the Soft Skill Competency Framework

Guide for Developing the Soft Skill Competency Framework	
1	The goal of the framework is soft skill development.
2	The HEI has the responsibility to provide graduates with the capability by developing variables of employability capital.
3	Employability capital is represented by identity capital, human capital, PsyCap, social capital, cultural capital, and zero harm capital.
4	Interns are selected for internships based on their demonstrated capabilities in these variables of employability capital.
5	The transfer of capability into soft skill competency results in employability.
6	The transfer of intern capability to soft skill competency is the responsibility of Eskom.
7	Social intelligence, emotional intelligence and PsyCap facilitate soft skill competency.
8	The soft skills required for intern employability were determined and linked to the behaviours that would indicate competency in the soft skills.
9	Intern development is dependent on a conducive workplace environment.
10	Leadership is responsible to ensure a conducive workplace environment.
11	Leadership should have appropriate skills to manage the workplace environment.
12	Social intelligence and emotional intelligence will render leadership with appropriate mental capacity to deal with non-conducive workplace environments.
13	The leadership brand pillars will empower leaders to manage interns and their development effectively.
14	The pillars of servant leadership and living the ethics code and values will establish an environment of trust.
15	The pillar of leadership that creates a learning environment will guide leaders in committing to the internship programme.

Source: Researcher.

The process can be implemented by means of a planning framework for execution, as presented in Table 7.9.

Table 7.9: Planning Guide for Executing the Integrated Framework

No.	Guiding Determinant	Action
1	Soft skill behaviours	Indicate behaviours as outcomes of development
2	Soft skills	List 15 soft skills validated by Eskom experts
3	Ranking of soft skills	Rank the soft skills in the focus areas determined by the Eskom experts
4	EQ, SQ, PsyCap	Indicate the facilitation role for enhancing soft skills
5	Employability capital	Indicate the capability requirements before acceptance for internship.
6	Workplace environment respect	Show the integrated results of development of respect
7	Workplace environment trust	Show the integrated results of development of trust
8	Leadership commitment to intern development	Show the elements that determine managerial commitment to intern development
9	Determine flow of development	Clearly show how learning is integrated to produce the soft skill behaviours as employability outcome
10	Determine development responsibility	Frame the different responsibilities for development
11	Indicate flow	Allocate arrows to show the optimal development flow

The draft framework is displayed graphically in Figure 7.7.

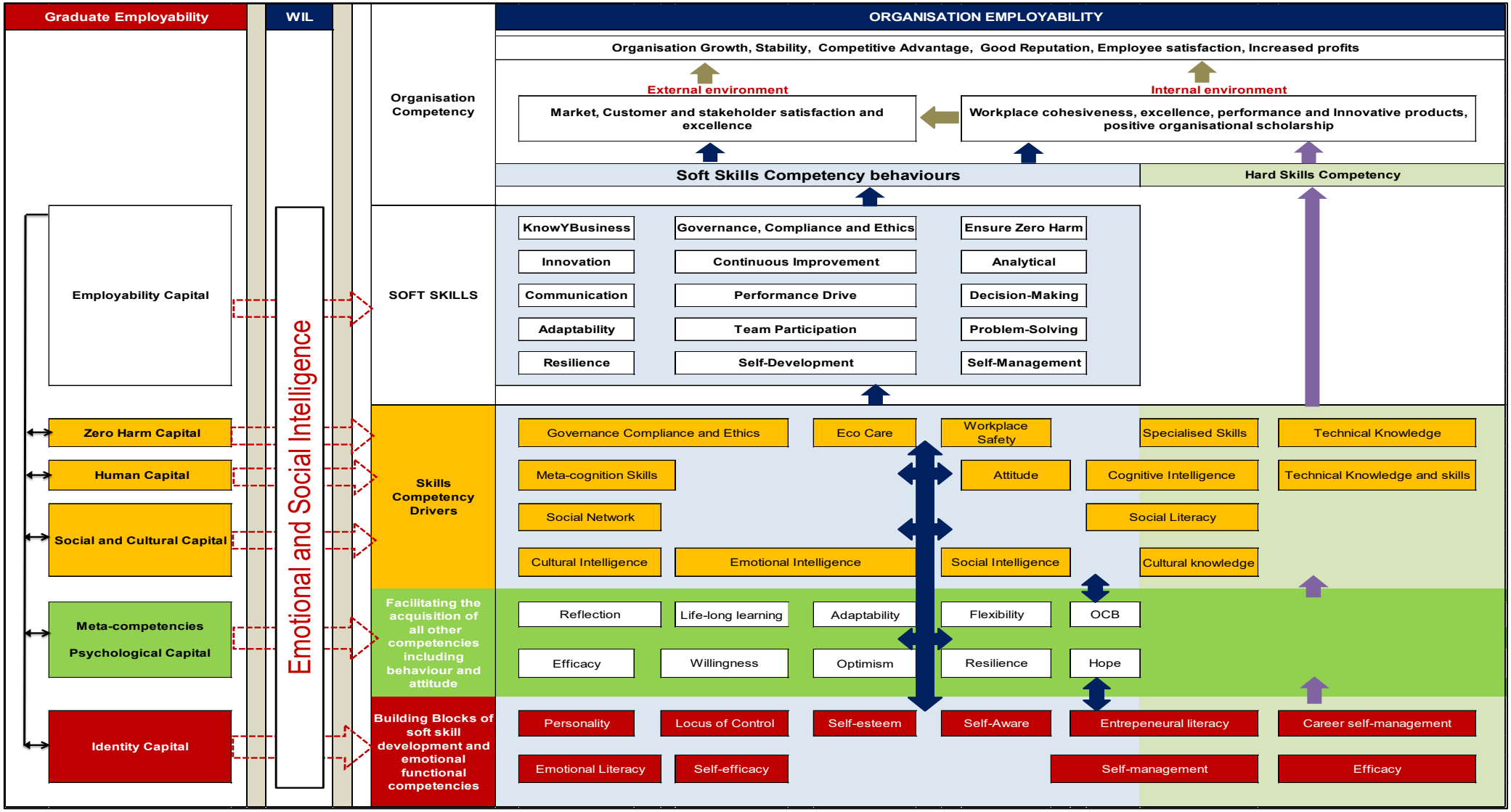


Figure 7.7: Draft soft skill competency framework

Source: Developed by researcher.

The next section describes the process and outcome of the evaluation by academic experts.

7.4 EVALUATION OF THE PROPOSED SOFT SKILL COMPETENCY FRAMEWORK

Once the proposed framework had been structured, it was presented to three academic subject experts in the field of industrial psychology for evaluation. The aim of the evaluation was to gather expert input as to the feasibility of the proposed framework, identify shortcomings, and gather opinions on the alignment of the elements, design, and structure of the framework, and if it would be suitable for the intended purpose. The experts were also requested to give any additional feedback they regarded as necessary.

In line with the advice of Okoli and Pawlowski (2004), the experts were qualified and skilled appropriately to make an expert contribution in evaluating the draft framework. Two of the participants occupied lecturer positions in the field of industrial psychology, and one was a practitioner in the field of industrial psychology.

7.4.1 Results of the Evaluation of the Draft Soft Skill Competency Framework

The developed draft of the soft skill competency framework presented in Figure 7.7 was sent to the academic experts through email correspondence. An information pamphlet explaining the purpose of the study and a comprehensive guide detailing how the framework had been developed, its purpose, and various constructs were included with the questionnaire. Participants were requested to submit written consent (as per Appendix D) as confirmation of willing participation in the evaluation process.

The panel participants were informed that their professional views about the feasibility of the developed framework and its elements would be required. Secondly, the experts were required to consider whether the soft skill competency framework could serve as a workable solution for enhancing intern employability when linked to an intern development programme.

7.4.2 Discussion of Evaluation Results of Academic Experts

The feedback from the validation rendered full consensus on three of the questions. Two questions, addressing potential shortcomings and alignment of the framework concepts, showed partial consensus among the panel members. The results are presented in Table 7.10.

Table 7.10: Summary of the Evaluation Responses of the Academic Panel

Framework Feedback	Participant 1	Participant 2	Participant 3
Framework has shortcomings	Agree	Do not agree	Do not agree
The framework aspects align	Do not agree	Agree	Agree
The design and structure is good	Agree	Agree	Agree
The framework is fit for purpose	Agree	Agree	Agree
In general, framework is acceptable	Agree	Agree	Agree

Source: Researcher.

The two aspects where suggestions were made or enhancements were suggested are discussed next.

7.4.2.1 Possible shortcomings of the framework

One of the participants believed that the colour of the arrows that indicated the process flow were not sufficiently distinguishable. In the final framework, the arrows were changed to two primary colours, namely black for intern development and blue for leadership development. The arrows were rearranged to indicate the development flow. The development responsibilities were indicated in colour to highlight where the HEI and Eskom responsibilities reside. Footnotes were also added to guide the reader in understanding the elements, responsibility, and flow.

However, there was consensus that the framework is comprehensive, complete, and well supported by the literature.

7.4.2.2 Opinion on the alignment of the various aspects

Two of the participants were in full agreement with the alignment of the contexts of the framework. One participant, however, believed that distinguishing between PsyCap and social, cultural capital is unnecessary and that some soft skills items should be clearly integrated and grouped, i.e. emotional and social intelligence which are facilitators but also skills. The overlapping aspects have been consolidated in the fundamental elements during the final construction of the framework.

7.4.2.3 Opinion on the design and structure of the framework

The majority of the panel members described the framework as an “eye-opener”, suitable in identifying learner development shortcomings and training needs, and easy to understand by a layman. However, one participant suggested the framework was too detailed and that some concepts be integrated. The final framework presents a consolidated integration of the empirically determined skills and the guiding

literature. However, the hard skills and organisation competency variables were removed from final framework.

7.4.2.4 General feedback

Overall, the panel concurred that the framework was fit for purpose, and the presented framework was a useful tool for soft skill competency enhancement. The opinion was raised that the bottom-up approach would lead to good organisation outcomes. It was also believed that the combination and alignment of the soft skills competencies with technical skills could only improve overall leadership skills. One panel member presented that “the framework brings a new dimension of soft skills to the workplace, and the implementation will have an enormous impact on employer and employee relationship”.

7.4.2.5 Concerns raised

Concerns were raised if Eskom would support the framework in the long term and if the framework would endure in the workplace. One of the specialists highlighted that guidance would be required on the practical issues of successful implementation of the framework.

7.4.2.6 Conclusion of fitness of the framework for enhancing soft skill competencies of Eskom interns

This section presents conclusions for the research question: Is the compiled soft skill competency framework appropriate and valid for Eskom intern employability?

Overall, the panel concurred that the framework was fit for purpose, and the presented framework was a useful tool for enhancing soft skill competency. The opinion was raised that the bottom-up approach would lead to good organisation outcomes. It was also believed that the combination and alignment of the soft skills competencies with technical skills could only improve overall leadership skills.

Another held that “the framework brings a new dimension of soft skills to the workplace, and the implementation will have an enormous impact on employer and employee relationship”.

Concerns were, raised if Eskom would support the framework in the long term and if the framework would endure in the workplace. One of the specialists highlighted that guidance would be required on the practical issues of successful implementation of the framework. The comments and concerns raised by the academic panel are deliberated further in the triangulation and interpretation section.

To provide meaning to the framework, it is necessary to clarify the soft skill competency descriptions to ensure a common understanding. Table 7.11 presents the researcher’s view derived from the literature reviewed and research results.

Table 7.11: Descriptions of the Soft Skill Competencies

Soft Skill	Description
Adaptability	The ability to manage change positively, whether small or structural.
Analytical	Apply due consideration to all elements of a topic without losing sight of the holistic picture and environmental influences.
Communication	Clearly converse with others in a factual, respectful and understanding manner while practising patience, consideration, and listening.
Continuous Improvement	Continuously strive to identify improved ways of doing things and encourage others to follow your example.
Decision-making	Factually evaluate all influencing factors, root causes, and solutions to render the best possible solution while considering relevant risks.
Ensure zero harm	By complying with regulations, rules, procedures, and personal commitment, and preventing harm to self, others, the organisation, and the environment.
Governance and compliance	Know and comply with all rules, legislation, procedures, and policies. Always behave ethically and honestly for the benefit of the organisation.
Innovative	Think outside the box and not only create new ideas, but also inspire others and drive implementation of the ideas.
KnowYBusiness	Consider how your actions and performance will contribute to company success or failure. Seek to understand and consider all aspects that will affect the organisation and protect its revenue sources.
Performance drive	Through proper planning and personal commitment, apply the self through hard work to ensure quality, timely output within optimal cost, and customer satisfaction.
Problem solving	Consider all causes and risks of a problem to derive the best possible, ethical solution to resolve the problem.
Resilience	Continue, irrespective of constraints and difficulties.
Self-development	To be open to new learning and continuously strive to improve understanding, knowledge and skills in a process of lifelong learning. Support the growth of the organisation by keeping up to date with relevant support knowledge.
Self-management	The ability to reflect and understand oneself, believe in oneself, motivating oneself, act responsibly and manage one's emotions.
Social skills	The skills needed to interact effectively with others to establish mutual understanding and cohesiveness.
Team participation	To work well with others, support them, respect them, keep good relations, and drive team performance to the benefit of the team and organisation.

Source: Researcher's understanding.

The next section considers whether the soft skill competency framework complies with the skills requirements of the 4IR.

7.5 CHAPTER CONCLUSION

The chapter aimed to derive a draft soft skill competency framework using literature guidance and the empirical researched information. A second objective was to present the draft framework to a panel of academic experts for evaluation.

The chapter concluded on elements of and proposed a soft skill competency framework to enhance intern employability. A panel of academic specialists involved in industrial psychology found validation for the framework. The views of the panel about the framework were discussed.

Chapter 8 will conclude the study with a summary of the main guiding principles of the research questions investigated. The final framework will be presented, and recommendations will be made. Next, the significance and limitations of the study will be considered. Finally, recommendations for future research will be made.

CHAPTER 8

CONCLUSION, STUDY CONTRIBUTION, LIMITATIONS, AND RECOMMENDATIONS

8.1 INTRODUCTION

The primary objective of the study was to:

> Develop a soft skill competency framework to enhance intern employability in Eskom

The objective of this last and final chapter is to summarise the study and findings, present the final developed framework, and offer some concluding considerations and recommendations.

The argument raised in this study is that graduate employability can be enhanced through (i) graduate employability capital, which, when (ii) facilitated through emotional and social intelligence practices within work-integrated learning opportunities, will (iii) render the soft skill competence needed by organisations to support organisational growth. The literature review is framed around this argument in an integrated and holistic view through the lens of the 4IR.

Accordingly, the chapter commences with a summative view of the study by reporting on each research questions raised in support of the argument and study objective. The study concludes with a presentation of the significance of the study, some limitations, and recommendations for future research.

Chapter 1 introduced the study and presented the research questions (section 1.2) that guided the study to satisfy the primary study objective ultimately. The next section will interrogate each question and its conclusion individually.

8.2 STUDY OVERVIEW

This section presents the findings of each research question and its value for or contribution to the overall study objective.

8.2.1 Research Question 1

Chapter 2 addressed Research Question 1:

> What are the drivers and challenges of employability?

The question aimed to contextualise employability within its current environment. The discourse in defining the concept was highlighted. It was concluded that employability is defined predominantly through the three different and often contradictory views of governments, higher education institutions,

and employers. The significant drivers of employability were identified as the continuous changes in the economic market (section 2.3.1), government changes in policy directions (section 2.3.2), and the industrial revolutions (section 2.3.3).

The focus was on the influence of the 4IR, its megatrends, and the implications thereof for the employability agenda.

The challenges of the 4IR were discussed (section 2.4), and six megatrends were identified that would affect economic markets during the 4IR period. The megatrends are globalisation, environment, individualism, digital expansion, and technology convergence. The implications of these megatrends were discussed in terms of their operational and employability effect on the employer, existing employees, and graduates.

A vital consideration highlighted (section 2.4) was that graduates need to have appropriate skills and abilities to be employable and support organisational growth during the 4IR. As a core component of organisational capital, the human skill competencies generate a competitive advantage and growth for organisations. Signalling the appropriate 4IR skill capabilities to potential employees will support graduate employability.

8.2.2 Research Question 2

Following the contextualising of employability in terms of its environment, the focus of the first portion of Chapter 3 (section 3.3) was to contextualise the employability capabilities needed by graduates to be deemed employable by answering the research question:

> Which driving concepts and theories define graduate employability?

Peeters et al. (2019) describe employability in terms of the personal resources or capitals required by graduates to obtain and retain employment. This chapter then focussed on the first portion of the study argument by describing the personal resources as graduate employability capital as the key driver of employability potential.

It was shown through the theory that the guiding principles for employability capital are human identity, psychological, social, and cultural capital. These guiding principles were investigated through various theories and models guiding their contextual elements. For each of these forms of capital, an overview of the most prominent perspectives and their elements was presented. Of note is the purpose of each capital and its contribution to the employability framework. Human capital is a critical source of value, innovation, competitive advantage, and organisational performance, while identity capital is regarded as the building blocks of soft skill development.

On the other hand, it was determined that psychological capital (PsyCap) offers graduates the personal tools to survive the demands of the 4IR workplace. Social and cultural capitals provide a platform for effective social interaction and relationships in the workplace environment. It was also found that emotional and social intelligence plays a significant mediating role in converting capabilities into competencies in the workplace.

Following the contextual determination of employability capital, the discussion turned to the significant approaches involved in employability decision-making (section 3.4). Literature indicates three guiding approaches considered by organisations when evaluating employability, namely capability, competency and performance**.** The various principles and models of these approaches were considered to determine how they affected employability. It was determined that **capabilities** represent the employability capital that will signal employability potential to the prospective employer. **Competencies** realise only through practice and performance in the workplace. It is often used in the context of organisational survival and as a differentiation factor. An important take away was Tomlinson's (2018) view that competencies are demonstrated as behavioural outputs in support of organisational objectives. It was found that **performance** is linked to the willingness to support organisational objectives. These guiding principles provided a conceptual framework of the employability context and the role of employability capital and skill competency for organisations to be successful.

8.2.3 Research Question 3

The remainder of Chapter 3 addressed Research Question 3, namely:

> How can employability be developed?

The section (section 3.5) also represents the second part of the study argument, namely that graduate employability is facilitated through emotional and social intelligence practices within work-integrated learning opportunities.

The various methods of developing graduate employability in HEIs and the organisation environment were discussed. WIL was considered an essential vehicle to develop the skills competencies of graduates. The taxonomy that was used to demonstrate the guiding principles in developing graduate employability potential and employability competency is restated in Figure 8.1. The study argues that while HEIs should be responsible for graduate capability development, employers should offer work-integrated learning opportunities to develop graduate potential into employability competency.

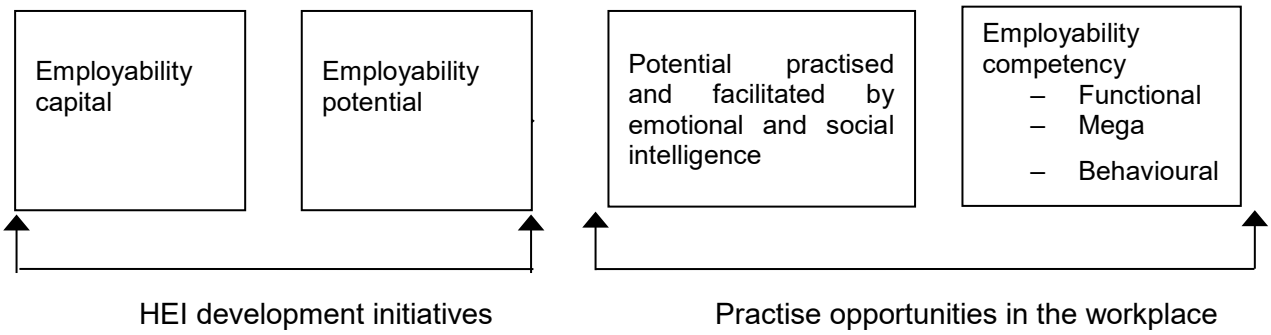


Figure 8.1: Principles Guiding Development of Capacity and Competency (restated Figure 3.8).
Source: Researcher's understanding from the assessed literature.

A critical requirement was raised as to the learning support rendered by the workplace environment and leadership.

8.2.4 Research Question 4

The 4IR is identified as a critical driver of organisational survival in the foreseeable future. Of note is the conclusion that soft skills will drive organisational success during the 4IR. Chapter 4 dealt with the core concept of the study, namely soft skill competence. It answered the question:

> Which driving concepts, theories, and drivers define soft skills?

The research argument is fully satisfied in section 4.4 where it is discussed that graduate employability, facilitated through emotional and social intelligence during WIL, will render the soft skill competence required by organisations to support organisational growth in the 4IR.

The skills required by organisations during the 4IR were introduced through the views of prominent academic experts (section 4.2). Subsequently, the various models and theories that support the guiding principles of soft skills competency were conceptualised (section 4.3). Once soft skill competency had been linked to employability capital potential, the researcher turned to addressing the identified theoretical shortcomings. The concept of ensuring zero harm was framed and defined within the employability soft skill framework. Within this newly identified concept, the sub elements of eco care and workplace health and safety were defined. The principles derived from discussing questions 1 to 4 allowed the researcher to formulate a theoretical framework (section 4.6, Figure 4.3) to guide the drafting of a soft skill competency framework.

8.2.5 Research Question 5

Chapter 5 introduced the approach and methods employed to address the empirical research questions and give effect to the study objective. The research falls within the applied research domain and focuses on a specific organisational problem and current practices regarding intern development. The pragmatic

paradigm was found the most appropriate paradigm to apply, as it assists researchers to facilitate human problem solving. Its further advantages are that it allows for inductive, rational experimental methods to collect, analyse, validate, or reject information quantitatively and qualitatively. Within the pragmatic paradigm, a concurrent transformative mixed-method design and the Delphi technique were selected to conduct the empirical research and find answers to the empirical research items.

The aim of the concurrent transformative mixed method was to determine the soft skill competency behaviours required by Eskom. A validated quantitative data selection instrument (section 5.3.2) was developed and used to gather information on the soft skill behaviours. Existing scales were expanded upon with questions to test the new capital construct of ensuring zero harm. Data were collected by means of a single questionnaire consisting of 255 quantitative items and one open-ended qualitative question. The qualitative responses would (i) indicate to the researcher if any soft skill behaviour had been omitted, and (ii) allow the researcher further and deeper understanding of the respondents' thought processes and opinions. Challenges were also raised (section 6.2.5) for consideration which added valuable insights into aspects in the workplace environment that potentially could derail any intern development efforts.

Using the probability method of simple random sampling, a sample of supervisors and MPS was selected to complete the questionnaire. These two groups represented the main stakeholders involved in developing the graduate interns and executing organisational, operational strategy (section 5.3.1).

Data were collected (section 5.3.2) by means of the EVA survey system. Owing to the vast geographical area covered in the investigation, the researcher used surveys to collect data. Once the data had been collected, the data set was cleaned and prepared for analysis. The scale and quantitative data were tested for validity and reliability (section 6.2.3). Descriptive and inferential analyses were used to analyse the quantitative data (section 6.2.4 and 6.2.5.1). The qualitative data were sorted and grouped by means of the content analysis and analysed at face value (section 6.2.5.2). Soft skill analysis was followed by interpreting and comparing the survey opinions by means of triangulation (section 6.2.5.3). Raised challenges were identified and considered further. The final list of determined soft skills was developed with the importance ranking allocated by the respondents to each soft skill.

Once completed, the Delphi technique (section 6.3) was used to collect opinions from a panel of Eskom subject experts to confirm the relevance and importance of the collected competency behaviours. Both the purposive expert and snowballing sampling methods were used for focused and quick, targeted sample selection. The Round 1 questionnaire (section 6.3.3) was distributed by means of email correspondence. Once the data had been collected, the differences between the opinions of the panel members were determined A second Delphi round (section 6.3.4) was conducted telephonically with a focus on maximising panel concordance in terms of the ranking of the identified soft skill behaviours. Data

consensus was maximised in the second round. The critical determined behaviours were triangulated, and the soft skills were ranked (section 6.4).

A draft soft skill competency framework was developed and presented to a panel of academic subject experts with the request to evaluate the draft framework. Two participants occupied lecturer positions in the field of industrial psychology, and one was a practitioner in the field of industrial psychology. The questionnaire was distributed to the panel members by means of email correspondence. Once their opinions had been received, the data proposing improvements were actioned, and the final soft skill competency framework was designed (see section 7.4).

Throughout the empirical phases, the ethical research requirements of permission to conduct the study, voluntary participation, confidentiality of responses, anonymity of participation, reputation, and principles regarding legal risks and no harm were considered and implemented.

Guided by the processes described, Chapter 6 answered the empirical guided research question: **Which soft skill behavioural competencies does Eskom require?**

Chapter 6 presented the central focus of the research, namely the results of the empirical research, the statistical and descriptive analysis of the results and the interpretations thereof. The collected quantitative and qualitative data were analysed, and behaviours were interpreted by means of their allocated soft skill categories to answer the research question (sections 6.2).

8.2.6 Research Question 6

Research Question 6 was also addressed in Chapter 6 with the aim to determine if subject matter experts in Eskom support the soft skill behavioural competencies (see section 6.3).

The Eskom panel of experts reached full agreement on the soft skill behaviours identified as necessary by the respondents. However, the panel did not agree on the importance ranking of some of the identified soft skill behaviours, and there was a difference in opinion between the panel experts and the respondents (Table 6.23). The quantitative, qualitative, and panel results were triangulated and discussed. The researcher selected to use the ranking of the experts to rate the focus of development for the compiled soft skills.

Chapter 6 concluded the primary research question: Which soft skill competencies will satisfy employability criteria for graduate interns in Eskom?

8.2.7 Research Question 7

The aim of Chapter 7 was the compilation of a draft proposed framework (section 7.3., Figure 7.6) based on the guiding principles of the theoretical framework (Figure 4.3) and the results of the mixed-method research study. The chapter concluded the final and overarching Research Question 7:

Is the compiled soft skill competency framework appropriate and valid for employability of interns in Eskom?

A panel of academic experts were requested to evaluate the draft proposed framework for suitability ('fit for purpose') (section 7.4). The academic experts found validation for the proposed soft skill competency framework.

In a final exercise, through the lens of the 4IR, the derived soft skills were triangulated in terms of structure. It was concluded that the derived soft skills for Eskom were aligned with the 4IR skills. The next section provides a brief overview of how quality was entrenched throughout the study to render a quality supported framework.

8.3 QUALITY INSURANCE OF STUDY OUTCOME

The purpose of any applied study is to render a quality outcome that would support application quality for the intended study outcome. Permission was obtained from Eskom to conduct the study. During the study tenure, Eskom changed its policy to enhance governance practices. A second application under the new policy was submitted, and permission was granted to continue with the study.

In addition, two ethical compliance applications were tendered to the University of Free State: Ethics Committee for approval to proceed with the mixed-method strategy and a second time, before conducting the Delphi method and evaluation processes. Permission was granted for all rounds of data collection.

Quality in the study was planned and implemented in the design from the planning to the reporting of results. Selection of the population was restricted to individuals (MPS and supervisors) who could contribute directly to the topic under study. To reduce bias, a random sampling exercise was conducted against the email addresses of all MPS and supervisors who stated their role on their Outlook 2010 profiles.

The measuring instrument items were derived from existing valid and reliable soft skill scales and accredited published scholarly works. To increase content validity, an open-ended qualitative question was added to the instrument for respondents to state any omitted soft skill behaviours and give their opinions on soft skills, their importance, and any challenges experienced. Validity was enhanced by testing 255 soft skill behaviours, duplicating questions, stating an inverse-rated behaviour, and adding behaviours measuring the effect of fatigue on the outcome.

The survey was sent to participants by means of the online EVA system. An information sheet was sent to the participants by means of an email stating the link to the EVA survey and an invitation to participate. Permission for participation had to be indicated on the survey. This enabled the researcher to protect the anonymity and confidentiality of participation. In considering the no-harm principal, reputational risk to the participants who participated in the data-collection processes and those of Eskom was considered throughout the collection processes and analysis.

To increase response validity, reminders were sent to the survey respondents, and additional time was allowed to motivate participation. The final response rate was deemed sufficient to support data quality and to allow statistical analysis in terms of construct validity and reliability of measurement scale.

Data were analysed thoroughly, and procedures were implemented for outliers, missing data, and fatigue effect to limit any errors. Missing data were replaced by the mean of the item, while two surveys were disregarded as they exceeded the predetermined limit for missing data. Construct and content validity and reliability were confirmed by means of statistical reliability tests, confirmatory factor analysis, and the Delphi method.

The Eskom panel of experts for participation in the Delphi method was selected by means of purposive and snow-balling sampling of experts from within the Eskom Centre of Excellence, Human Resources, and lecturers at the Eskom College. During the Delphi consensus method, the Eskom panel of experts confirmed the validity of the soft skill behaviours and associated soft skills in two rounds to reach consensus. The experts also confirmed content validity.

Using literature as guidance and statistical analysis assisted the researcher to reach sound conclusions. The draft framework was presented to a panel of academic experts who confirmed that the framework was feasible in terms of design and structure, alignment of the elements exist, and the suitability ('fit-for-purpose') of the framework. Proposals were implemented and small adjustments were made to enhance the framework. The next section presents conclusions regarding the final soft skill competency framework.

8.4 A FRAMEWORK FOR ENHANCING SOFT SKILL COMPETENCY OF INTERNS IN ESKOM

The framework for enhancing soft skill competency of Interns in Eskom is presented. The framework addresses the soft skill competencies that will satisfy employability criteria for graduate interns in Eskom. Three main groups of guiding concepts were used to develop the final framework, namely theoretical concepts, empirically researched soft skills determinants, and learning-conducive workplace determinants.

8.4.1 Theoretical Concepts Guiding the Framework

The following theoretical concepts guided the framework:

a) Consider the theoretical shortcomings in terms of societal responsibility (Cimatti, 2015; Jackson, 2015; Walker et al. 2017) and include the sub-element of **zero harm capital** in employability capital.

b) **Emotional and social intelligence** act as facilitators to transfer capability to soft skill competencies (Bar-on, 2006; Jackson, 2013; Navas et al., 2018; Smith, 2012).

c) **Psychological capital** predicts work attitudes and behaviours (Avey, et al. 2010). It facilitates the acquisition of functional, cognitive, and social competencies (behaviour and attitude) (Bandura, 1986; King, et al., 2016; Le Deist et al., 2005).

d) **Identity capital** is the building blocks of soft skill development and can be seen as the personal emotional functional competencies of an individual (Cimatti, 2016; Lewis, 2016).

e) **Social, cultural**, and **human capital** are regarded as the drivers of soft skill competency behaviours (Serrat, 2017; Tomlinson, 2017; Walker et al., 2017).

8.4.2 Determinants of Soft Skills that Guided the Framework

The objective of the study was to determine the soft skills and associated behaviours that would satisfy employability criteria of Eskom for graduate interns. The research results presented 15 soft skills, sub skills and associated soft skill behaviours as well as their ranking, which are presented in Figure 8.2. The soft skill behaviours are listed in Appendix K.

Rank	Soft Skill	Sub Skill	Visible in	Rank	Soft Skill	Sub Skill	Visible in
1	Zero Harm		Soft Skill Behaviours	6	Decision Making		Soft Skill Behaviours
2	Governance	a. Compliance with ruled b. Ethical Conduct		7	Analytical		
3	Performance drive	a. Apply Self b. Commitment c. Customer Care d. Planning		8	Team participation	a. Diversity Management b. Emotional Intelligence c. Social Intelligence d. Team Contribution	
				9	Problem Solving		
4	Self-Management	a. Manage Emotions b. Responsible Behaviours c. Self-Awareness d. Self-Believe e. Self-Motivation		10	Innovation		
				11	Communication		
				12	Resilience		
				13	Adaptability		
				14	Continuous Improvement		
5	Self-Development			15	KnowYBusines		

Figure 8.2: Soft skills identified for employability of interns in Eskom

Source: Researcher.

8.4.3 Determinants for a Learning-conducive Workplace

Challenges were raised by the participants that indicated workplace aspects that might hinder intern development and employability outcomes. The workplace environment is critical for the effective development of interns. Accordingly, the aspects highlighted were tested statistically against possible solutions. Appropriate determinants of a conducive workplace have been derived and relates to interventions for both interns and leaders. The determinants identified to mitigate the challenges and ensure a conducive learning environment are presented in Figure 8.3.

Figure 8.3: Determinants for a learning-conducive workplace
Source: Researcher.

8.4.4 Integrating the Three Determinants of the Framework

A guide that was developed to assist the researcher in integrating the literature concepts and the research results is presented in Table. 8.1.

Table 8.1: Integrating Guiding Literature and Result Contexts to Prepare the Framework

Integrated Guiding Literature and Result Contexts to Prepare the Framework	
1	The goal of the framework is development of soft skills.
2	HEIs have the responsibility to provide graduates with the capabilities developing employability capital.
3	Employability capital is represented by identity capital, human capital, PsyCap, social capital, cultural capital, and zero harm capital.
4	Interns are selected for internships based on their demonstrated capabilities in these forms of capital.
5	The transfer of capability to soft skill competency results in employability.
6	The transfer of intern capability to soft skill competency is the responsibility of Eskom.
7	Social intelligence, emotional intelligence and PsyCap facilitate soft skill competency.
8	The soft skills required for intern employability were determined and linked to the behaviours that would indicate competency in the soft skills.
9	Development of Interns is dependent on a conducive workplace environment.
10	Leadership is responsible to ensure a conducive workplace environment.
11	Leadership should have appropriate skills to manage the workplace environment
12	Social intelligence and emotional intelligence will render leadership with appropriate mental capacity to deal with non-conducive workplace environments.
13	The LEADERSHIP brand pillars will empower leaders to manage interns and their development effectively.
14	The pillars of servant leadership and living the ethics code and values will establish an environment of trust.
15	The pillar of leadership, which creates a learning environment, will guide leaders in committing to the internship programme.

The next step was to develop a guide to integrate the separate determinants.

Table 8.2: Integration of Determinants

No.	Guiding Determinant	Action
1	Soft skill behaviours	Indicate behaviours as outcomes of development.
2	Soft skills	List 15 soft skills validated by Eskom experts.
3	Ranking of soft skills	Rank the soft skills in the focus areas determined by the Eskom experts.
4	EQ, SQ, PsyCap	Indicate the facilitation role in enhancing soft skills.
5	Employability capitals	Indicate the capability requirements before acceptance for internship.
6	Workplace environment respect	Show the integrated results of respect development.
7	Workplace environment trust	Show the integrated results of trust development.
8	Leadership commitment in intern development	Show the elements that determine managerial commitment to intern development.
9	Determine flow of development	Clearly show how learning is integrated to produce the soft skill behaviours as an employability outcome.
10	Determine development responsibility	Establish the different development responsibilities.
11	Indicate flow	Allocate arrows to show the optimal development flow.
12	Clarification footnotes	Add footnotes for clarification of colours, arrows and development responsibility.

These guidelines were used to integrate theory, the workplace, and the soft skills in a final framework for enhancing soft skill employability competency of interns. The derived framework clearly indicates the flow of soft skill development. Interns are selected based on their graduate employability capital capability. It is the responsibility of the HEI and the intern to develop employability capital required to signal potential to Eskom. The skills of EQ, SQ, and PsyCap will facilitate soft skill competency. Accordingly, interns, as first focus of development, should be trained/re-trained in the principles of EQ and SQ. Interns should be made aware that their attitude directs PsyCap and is a critical determinant of employability in Eskom, and that measurement of their internship performance will include measurement of the soft skill competency behaviours. Accordingly, interns should be clear on which soft skill competency behaviours are linked to the 15 soft skills determined as important for employability in Eskom. Part of their responsibilities is to ensure that they reflect and evaluate themselves for growth and improvement.

It is the responsibility of Eskom management to provide a conducive working environment where trust and respect will flourish and optimal learning can occur. This can be accomplished through commitment and application of EQ, SQ and setting the example on living the values and Ethical Code of Conduct of the organisation. The leadership brand pillars will provide the platform for effective workplace environments and performance. The final framework is presented in Figure 8.4.

SOCIAL CAPITAL

Social Intelligence Emotional Intelligence PsyCap

IDENTITY CAPITAL

PsyCap Emotional Intelligence Social Intelligence

ZERO HARM CAPITAL

Social Intelligence Emotional Intelligence PsyCap

Determination 3

Rank	Soft Skill	Sub Skill	Visible in
1	Zero Harm	Determination 2	Soft Skill Behaviours
2	Governance	a. Compliance with ruled b. Ethical Conduct	
3	Performance drive	a. Apply Self b. Commitment c. Customer Care d. Planning	
4	Self-Management	a. Manage Emotions b. Responsible Behaviours c. Self-Awareness d. Self-Believe e. Self-Motivation	
5	Self-Development		

Rank	Soft Skill	Sub Skill	Visible in
6	Decision Making	Determination 1	Soft Skill Behaviours
7	Analytical		
8	Team participation	a. Diversity Management b. Emotional Intelligence c. Social Intelligence d. Team Contribution	
9	Problem Solving		
10	Innovation		
11	Communication		
12	Resilience		
13	Adaptability		
14	Continuous Improveme		
15	KnowYBusines		

CONDUSIVE WORK PLACE and INTERN DEVELOPMENT ENVIRONMENT

TRUST Determination 7 UPHOLDS THE ETHICS AND VALUES Determination 6 RESPECT

Social Intelligence Emotional Intelligence PsyCap

CULTURAL CAPITAL HUMAN CAPITAL

Determination 8

Leadership Commitment

Uphold Ethics Code and Values

Leadership Brand Pillars

Leadership EQ and SQ

* The **BLACK** arrows indicate the flow of development

** The **GREEN** arrows indicate Leadership input for successful intern development

*** The indicate the responsibility of Heigher Education Institute and intern development

**** The indicate the responsibility of Eskom Intern Development Programme

Figure 8.4: Final Soft Skill Framework for the enhancement of Eskom intern employability

Source: Developed by researcher.

The following section will turn to the most important segment of the study and present the recommendations flowing from the study findings.

8.5 RECOMMENDATIONS FLOWING FROM THE STUDY FINDINGS

The study provided a broad understanding of employability, its global importance in managing the economic challenges, market interactions and changes, the survival of organisations during the 4IR, and the livelihood of graduates. Following the findings of the study, a company-specific soft skill competency framework for application in Eskom, was developed. The bottom-up approach presented in the framework supports good organisational outcomes, and implementation of it can add value to the organisation in general. In addition to the intended outcome, the combination and alignment of the soft skill competencies with technical skills can also improve overall leadership skills. Implementation of the framework will have an enormous effect on relationships between the employer and employees. While guidance will be needed in terms of practical implementation to mitigate the challenges and risks identified, it is not an option not to implement the framework.

Following from the study, the main recommendations are presented next, commencing with the recommendations for the organisation.

8.5.1 Recommendations for Eskom as an Organisation

With the advent of the 4IR, market forces have been shifting faster than with the previous industrial revolutions. Accordingly, the demand for new skills and competencies has been escalating at a faster rate than it did in the previous decade. Soft skills are regarded as the foundation of organisational growth, customer satisfaction, performance, and competitive market advantage.

8.5.1.1 Recommendation 1: Inclusion of the leadership brand pillars in the organisational turn-around strategy

There is consensus among stakeholders that Eskom is too big to fail. However, not having the right skill set will cause a huge delay in any turn-around initiatives, if indeed possible. Major concerns are derived from participants' opinions, for example, that interns are "*there to learn, not to reinvent the wheel – ability to do what you are told. They are there to work, not make friends, workplace bullying, harassment, lack of respect and trust".* These factors indicate that not all leaders embrace the leadership brand pillar of servant leadership in spite of all managers and supervisors having been trained extensively on the leadership brand pillars.

Yet, servant leadership is argued to be the most critical facilitator of self-actualisation, positive workplace attitudes, and job performance. It is imperative that management should set the tone for the required workplace behaviour through leading by example. Failure to take up the baton for the organisation has

had negative effects on employee behaviour, employee wellness, employee commitment, job performance, governance and ethical behaviour in the organisation. The call and encouragement to leadership to embrace the leadership brand has not rendered the required success. This is also evident in the prevailing silo mentality, sabotage, and asset-destruction efforts by employees experienced in the organisation. It is clear that management are not in touch with their staff and do not manage their employees' emotions effectively.

Scholarly works do not venture into strategies to address leaders who fail to discharge their duty and accountability in terms of the leadership brand pillars. Welch and Welch (2010) do not hesitate to make the call for the termination and replacement of leaders that do not take up their responsibility to lead successfully during times of change and hardship. Therefore, a point of departure for Eskom is to take a firm stance on what behaviour and attitude they expect from their leadership, employees, and interns during the current crises and going forward. Those who fail to hear the call to embrace the leadership pillars and walk the golden mile should be mentored and guided. Should these interventions not prove to render results, their services should be terminated.

8.5.1.2 Recommendation 2: Expansion of key performance areas

In business, there is no truer saying than "what gets measured, gets done". Currently, no obligation rests on any employee to self-develop or develop others in the soft skills required to effect a turn-around or survive the 4IR. While Eskom's leadership brand incorporates the responsibility of development, development initiatives are not soft skill driven. Mentorship is often regarded as a steppingstone to higher positions, and not so much the transfer of skills.

It is recommended that key performance indicators (KPIs) be developed for appropriate soft skill-directed behaviours and the application of the four leadership pillars. The KPIs should be incorporated in every leader's performance contract, while the development of soft skills should be included in all employees' individual development plans. Measurement could be conducted by means of climate measurement of each leader's area of responsibility once a year to monitor progress. Soft skill gaps should be identified, and personal development plans be updated accordingly.

While the measurement of soft skills is not an easy task and often time consuming, the benefits derived outweigh any negative factors.

8.5.1.3 Recommendation 3: Development of a soft skill training programme for interns

Currently, the Intern Development Programme does not include soft skill development. It is recommended that an appropriate curriculum plan be developed for implementation of the soft skill framework. This should be done in such a way that perseverance of the framework in the workplace is guaranteed.

In addition, study results indicate that the developed soft skill competency framework is generalisable in Eskom (6.4). That means that the framework can be utilised for the development of all employees, including leaders.

Accordingly, Eskom can review the existing soft skill status of the organisation, followed by an analysis of the skill gaps against the framework. Where necessary, the assessment can be conducted by using the soft skill behavioural items of the framework as guidelines, after the framework has been consolidated and shortened.

Various development strategies should be considered within the financial means of the organisation, – not only for interns, but also for existing employees to update their skills in relation to the 4IR requirements. One of the most important characteristics of the framework is that it allows for self-development and measurement. This benefit comes at no cost to the organisation. Providing the framework to employees for self-development will have the benefit of reducing training intervention costs.

Incorporating the skill development progress in the existing personal development plans as well as KPIs would be an appropriate method to enforce the importance of soft skills in organisational success. Given Eskom's financial constraints, the company should consider the strategies of mentorship, 'buddy' system, coaching, and 'lead by example', which do not involve additional costs.

8.5.1.4 Recommendation 4: Support for the implementation of the soft skill framework

Support to managers will be critical to ensure the appropriate roll-out and implementation of the soft skill framework and associated training programme. A team within the current Human Resource Intern Programme Management fraternity should be dedicated to drive and steer the implementation and measurement of the implementation. Interns should be inducted into the programme and made aware of the importance of soft skills in their employability. Managers and supervisors should be guided in the implementation and the value thereof. In short, the survival of Eskom depends equally on hard and soft skills. The focus should be equal in terms of support and drive.

8.5.2 Recommendations for Eskom leadership

The value of appropriate leadership skills in an organisational crises and turn-around strategy cannot be overstated. Supported by the leadership brands, the framework provides an opportunity for leaders to establish an enhanced relationship with those they lead, minimise uncertainty, build resilience, and steer them through organisational changes.

8.5.2.1 Recommendation 5: A workplace environment conducive to learning

It is the responsibility of management to create and sustain a workplace environment that is conducive to learning. Given the low staff morale and climate of distrust in the organisation after state capture,

management needs to turn the workplace environment into one of conduciveness, efficiency and effective performance.

One consideration is that inappropriate leadership behaviours often invoke negative behaviours and attitudes. Leadership should set the example for interns as to what behaviour is expected from them in terms of appropriate workplace behaviour.

Secondly, application of the four leadership brands, practising EQ and SQ, and living the values and ethics code of the organisation will transform the workplace culture and its environment. In addition, management needs to have the courage to deal with individuals who disrupt the workplace equilibrium immediately and effectively.

A factor that often affects a conducive workplace environment is the perceptions linked to skill shortages. This derives from a misconception of managers that appropriate skills are not available. With the embargo on appointments and the importance of collaborative skills during the 4IR, managers could reach beyond the silo mentality in the business and enter into collaborative secondment and assistance agreements. This will strengthen relationships across the Eskom environment and alleviate workplace environment stressors.

8.5.2.2 Recommendation 6: Implementation of soft skill competency framework

It is recommended that leadership embrace the framework for self-development as well as application. The simplistic nature of the framework makes it most suitable for self-development and self-measure. In addition, it is recommended that leadership enter into mentorship agreements with suitably skilled individuals external to Eskom. Such mentorship opportunities bring a new view on old perspectives and can stimulate innovation to the benefit of Eskom.

In addition, leaders must commit to the implementation of the framework for interns and current employees. It is notable that the role of the intern has changed from “carrying the tools and observe” to one of sophisticated contribution. Leaders should take note of this development and adjust their strategies to accommodate the changing role.

Employability within the organisation is just as critical a requirement as it is for graduates and interns. Leadership should implement the framework to ensure that their subordinates are suitably skilled to support the organisation in its turn-around and sustainability efforts. Individual development plans should be aligned to address the skill gaps identified by the leader. Monitoring, measuring, and giving feedback should occur regularly to stimulate personal growth.

Another critical aspect is that leaders should present with patience in support of the intern learning curve. Mistakes should be highlighted as growth opportunities, and guidance should be provided. One aspect highlighted is the propensity of interns to ‘look for excuses’ instead of accepting responsibility and

generate growth from the failure. Leaders should determine the tone and culture of learning from mistakes. Interns should feel safe to make mistakes.

8.5.3 Recommendations for Eskom Interns

Employability requires competency in both hard and soft skills. The simplicity of the framework will allow intern supervisors and the interns themselves to understand which soft skills and competencies are required to be deemed competent and employable. The framework is easily understandable by a layman and will allow for self-development and growth measurement.

8.5.3.1 Recommendation 7: Intern attitude

One critical understanding should be entrenched with interns – Eskom does not owe them anything. Eskom provides them with an opportunity to develop employability skills, and if successful and deemed competent, to offer them employment where vacancies exists. A negative attitude and disrespectful behaviour will be counterproductive to the workplace environment and will affect a successful internship dramatically. It is expected from interns to fully embrace the learning offered in terms of soft skills, not only to prepare themselves for employability but also for the personal growth garnered from skills such as EQ and SQ.

The framework provides the interns with detailed and clear behavioural expectation guidelines to support understanding of the behaviours expected in terms of the requirements of the organisation for employability. It is recommended that the detailed framework be provided to the interns at the point of induction for them to be aware of the soft skill behaviours and soft skills expected by Eskom for them to be deemed employable.

8.5.3.2 Recommendation 8: Responsibility to self-develop

Already in the induction phase, it should be emphasised to interns that development of employability remains their own responsibility, and that self-development is critical on their road to employability. Eskom can provide interns with knowledge, the ‘how-to’, coaching, mentorship, and the environment to practise personal growth. However, the energy and willingness remains the interns’ input.

The framework provides the interns with sufficient information to reflect on their behaviours. It further provides a practical comparative to determine any development needs. It is recommended that the framework be used by supervisors and interns as a practical guideline to measure and determine competency gaps in interns’ soft skills in order to address the shortcomings by means of appropriate learning interventions. Such a process stimulates awareness and provides specific and guiding behaviour descriptions that can assist them in personal growth. Thus, it is recommended that the interns use the framework as a point of departure for employability competency.

8.5.3.3 Recommendation 9: Development support

It is recommended that a 'buddy system' be implemented in support of intern development. The buddy system entails that the intern select a trusted individual to give constructive feedback regularly regarding the behaviour of the intern. This will allow the intern to reflect, gain insight into blind spots, and adjust behaviour for personal growth.

8.5.4 Recommendations for Existing Eskom Employees

Sustainable employability is no longer a right. It is required from existing employees to be competent in the skills required by Eskom to survive the challenges of the 4IR. The organisation simply cannot afford employees that do not contribute value to the organisation.

It is the responsibility of employees to stay relevant through continued self-development. Knowledge of the markets and external factors affecting the organisation will be of critical importance to every employee. Awareness will assist the employee in preparing for any changes and building resilience; In addition, market awareness can stimulate much-needed innovation. Therefore, it is recommended that existing employees take responsibility for self-development.

While coaching traditionally has been limited to technical skills, nothing prohibits employees from making use of an internal or external life coach to support them in their self-development endeavours to stay market relevant. Employees often make use of mentors on much higher functional levels, which is ineffective because the mentors cannot observe the individual on a daily basis to give valuable input regarding personal growth. It is recommended that employees seek mentors that interact with them daily to add value to the process.

The framework is laid out in such a manner that employees can easily understand the soft skill behaviour expected from them to remain employed and stimulate personal growth. It is recommended that the framework be made available to existing employees to create awareness of Eskom's required skills. The framework can assist them in self-development, direct their behaviour appropriately, and strengthen their resolve in the workplace.

8.5.5 Recommendations for the Industry

While it is not the study intent that the findings or the framework be generalisable to other sectors or organisations, the framework might provide insight to other organisations as to the skill requirements as well as the development process.

This concludes the section on the recommendations flowing from the research results. The significance and contribution of the study will be discussed in the next section.

8.6 SIGNIFICANCE AND CONTRIBUTION OF THE STUDY

The study objective was to develop a soft skill competency framework for enhancing intern development in Eskom. The framework elements were grounded soundly in theory and presented in a simplified and practical manner so that even laymen would understand its stages with the aim to enhance graduate employability. Academic specialists evaluated the framework, and their recommendations were incorporated in the final framework. The company-specific soft skill competency framework for application within Eskom was developed.

Contributions in terms of theory have also been made. While there is abundant knowledge on employability and associated theoretical frameworks, this study is the first to determine an organisation-specific soft skill competency framework for enhancing intern employability within the South African framework. In addition to this contribution, a novel research method was used to execute the research study and derive results.

Further, shortcomings were identified in the knowledge basket in terms of an employability capital that describes the principle of zero environmental, health, and safety harm. The underlying soft skill behavioural competencies and subcategories of the zero-harm capital concept were developed and tested in the Eskom environment, as potential soft skill requirements. The soft skill competency behaviours of ensuring zero harm were reported among the twelve critical soft skill competency behaviours identified by the Eskom respondents and subject matter experts. Given the 4IR focus on the environment and health and safety aspects (Vielmetter et al., 2014), the capital of zero harm was incorporated in the framework.

As a sub construct of the capital of zero harm, eco care could not be found in the existing body of knowledge in the employability subject field. Accordingly, it constitutes new knowledge for further development.

8.7 STUDY LIMITATIONS

Employee engagement and staff morale were at an all-time low in Eskom. The company faces dark days with high debt levels, a decrease in revenue, severely constrained cash flow, and reduced revenue collection with high outstanding debtors' accounts, state capture, structural changes, and poor governance. Eskom, as a necessity, had to decrease the pool of learners dramatically. Together with the long length of the quantitative questionnaire, the above-stated factors might have contributed to the low survey response rate. In addition, the original scope of the study had to be revisited, as permission could not be obtained to include current learners in the study research based on the concern that the exercise might create expectations among the interns.

Even while the Eskom expert panel agreed to participate in confirming the collected soft skill competency behaviours during prior arrangements, only three eventually contributed in confirming the soft skill competency behaviours.

It could also be argued that generalisation is limited to the internal environment of Eskom. However, the researcher is convinced that the framework principles and guidelines can be applied to other companies and similar contexts, albeit in a limited fashion.

8.8 RECOMMENDATIONS FOR FURTHER RESEARCH

The rapid market changes that characterise the 4IR might highlight the need for additional skills. To ensure relevancy, it is suggested that the identified Eskom soft skill requirements be explored periodically against the new skill demands and updated academic works for framework updates.

The newly developed concept of zero harm capital needs to be developed and tested by means of additional empirical research studies.

Future research could make a contribution and possibly be generalised to organisations in similar organisational life cycles.

A final consideration is research opportunities that will flow from the application of the framework in terms of effectiveness for employability and value added to the organisation itself.

8.9 CONCLUDING REMARKS

The study originated from a global phenomenon relating to the employability – or not – of graduates. A similar challenge is experienced by Eskom, who found interns not ready for employability. This has left Eskom unable to execute its shareholder mandate in terms of developing graduate interns for employability. Consequently, Eskom also fails to satisfy its requirements concerning employee succession. Prominent scholars argue soft skills as the missing element in the employer's requirements for skill competency.

More critical is the requirement for the already embattled organisation to face the 4IR on the back foot of near insolvency. As a critical contributor to the South African economy, Eskom may not fail. The predominant skill requirement for the 4IR is soft skills. Therefore, it was the aim of the study to develop a soft skill competency framework to support the enhancement of intern employability. Validity and reliability of the framework indicate generalisation to other Eskom employees.

One of the academic panel specialists commented, "The soft skill framework is an eye-opener to determine shortcomings and training needs with regard to soft skills." Another commented, "The framework brings a new dimension of soft skills to the workplace, and the implementation will have an enormous impact on employer and employee relationship". As a proud guardian employed in the service

of Eskom, it is the researcher's profound desire that this small contribution might assist in driving a soft skill revolution in Eskom to capture a renewed future of prosperity.

REFERENCES

Abdolvahabi, A., Bagheri, S., Haghighi, S., & Karimi, F. (2012). Relationship between emotional intelligence and self-efficacy in practical courses among physical education teachers. *European Journal of Experimental Biology*, *2*(5), 1778-1784.

Adams, L. A. (2013). *Ethics in medicine*. University of Washington School of Medicine. Retrieved from https://depts.washington.edu/bioethx/topics/resrch.html. Retrieval date: 18 March 2017.

Adeyinka-Ojo, S. (2018). A strategic framework for analysing employability skills deficits in rural hospitality and tourism destinations. *Tourism Management Perspectives*, *27*, 47-54.

Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, *27*(1), 17-40.

Ajayi, M. O. (2017). Influence of gender and age on organisational commitment among civil servants in South-West Nigeria. *Canadian Social Science*, *13*(2), 29-35.

Aldridge, A. (2001). *Surveying the social world: Principles and practice in survey research*. New York: McGraw-Hill Education (UK).

Altindag, E., & Kosedagi, Y. (2015). The relationship between emotional intelligence of managers, innovative corporate culture and employee performance. *Procedia: Social and Behavioral Sciences, 210*, 270-282. doi:10.1016/jj.sbspro.2015.11.367

Alvi, M. H. (2016). *A manual for selecting sampling techniques in research. MPRA Paper No. 70218.* Retrieved from https://mpra.ub.uni-muenchen.de/70218/. Retrieval date: 21 October 2017.

Amir, F., Naz, F., Hafeez, S. Q., Ashfaq, A., & Dogar, Y. H. (2014). Measuring the effect of Five Factor Model of Personality on team performance with moderating role of employee engagement. *Journal of Psychology and Behavioral Science, 2*(2), 221-255.

Ang, S., & Van Dyne, L. (2015). *Handbook of cultural intelligence*. New York: Routledge.

Ang, S., Van Dyne, L., & Koh, C. (2006). Personality correlates of the four-factor model of cultural intelligence. *Group & Organization Management, 31*(1), 100-123.

Anglim, J., & Grant, S. (2016). Predicting psychological and subjective well-being from personality: Incremental prediction from 30 facets over the Big 5. *Journal of Happiness Studies, 17*(1), 59-80.

Anitha, J., 2014. Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, *63*(3), 308.

Appelbaum, S. H. (1997). Socio-technical systems theory: an intervention strategy for organizational development. *Management Decision*. August, *35*(6), 452–463

Armstrong, A. R., Galligan, R. F., & Critchley, C. R. (2011). Emotional intelligence and psychological resilience to negative life events. *Personality and Individual Differences, 51*(3), 331-336.

Aryee, S., Walumbwa, F. O., Seidu, E. Y., & Otaye, L. E. (2016). Developing and leveraging human capital resource to promote service quality: Testing a theory of performance. *Journal of Management, 42*(2), 480-499.

Asiamah, N., Mensah, H. K., & Oteng-Abayie, E.F. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. *The Qualitative Report*, *22*(6), 1607-1621.

Atiku, S. O. (Ed.). (2019). *Human capital formation for the fourth industrial revolution*. Pennsylvania: GI Global.

Atkinson, G. (2016). *Work-based learning and work-integrated learning: Fostering engagement with employers*. Adelaide: Australia National Centre for Vocational Education Research.

Attar, A. A., Gupta, A. K., & Desai, D. B. (2012). A study of various factors affecting labour productivity and methods to improve it. *IOSR Journal of Mechanical and Civil Engineering*, *1*(3), 11-14.

Avella, J. R. (2016). Delphi panels: Research design, procedures, advantages, and challenges. *International Journal of Doctoral Studies*, *11*(1), 305-321.

Avey, J. B., Luthans, F., & Jensen, S. (2009). Psychological capital: A positive resource for combating stress and turnover. *Human Resource Management*, *48*, 677-693.

Avey, J. B., Luthans, F., & Youssef-Morgan, C. M. (2010). The additive value of positive psychological capital in predicting work attitudes and behaviours. *Journal of Management*, *36*(2), 430-452.

Baartman, L. K. J., & De Bruijn, E. (2011). Integrating knowledge, skills and attitudes: Conceptualizing learning processes towards vocational competence. *Educational Research Review, 6*, 125-134.

Babbie, E. (2006). Concepts, Indicators, and Reality in. *Sociology: Exploring the Architecture of Everyday Life Readings*, 66. Thousand Oaks: Pine Forge Press.

Babbie, E. (2011). *The basics of social research (5th edition).* Wadsworth: Cengage Learning.

Babbie, E., & Mouton, J. (2001). *The practice of social research*. Cape Town: Oxford University Press.

Baimyrzaeva, M. (2018) *Beginners' guide for applied research process: What is it, and why and how to do it?* Occasional Paper No.4, 2018, Institute of Public Policy and Administration, Graduate School of Development, University of Central Asia.

Bandaranaike, S., & Willison, J. (2015). *Understanding emotional work-readiness in the workplace*. Proceedings of the 19th World Conference on Cooperative & Work Integrated Education. Kyoto Sangyo University, Kyoto, Japan, August 18-22.

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology, 4*(3), 359-373.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Education. Psychology, 2*, 117-128.

Bandura, A. (1999a). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review, 3*(3), 193-209.

Bandura, A. (1999b). Social cognitive theory: An agentic perspective. *Asian Journal of Social Psychology*, *2*, 21-41.

Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, *38*(1), 9–44.Barnett, R. (2004). Learning for an unknown future. *Higher Education Research and Developmen*t, *23*(3), 247-260.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99-120.

Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory: A measure of emotional intelligence*. Toronto, Ontario: Multi-Health Systems.

Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, *18*, 13-25.

Bar-On, R., Handley, R., & Fund, S. (2006). The impact of emotional intelligence on performance. In V.U. Druskat, G. Mount, & F. Sala (Eds), *Linking emotional intelligence and performance at work: Current research evidence with individuals and groups*, (pp 3-19). London: Psychology Press.

Baruch, Y., 1999. Response rate in academic studies – A comparative analysis. *Human relations*, *52*(4), 421-438.

Batistic, S., & Tymon, A., 2017. Networking behaviour, graduate employability: A social capital perspective. *Education + Training, 59*(4), 374-388.

Battle, J. (1982). *Enhancing self-esteem and achievement.* Seattle: Special Child Publications.

Battle, J. (1992). *Culture-free self-esteem inventories for children and adults*. Texas: Pro-Ed.

Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, *25*(24), 3186-3191.

Beerbaum, D. (2016). *Towards an XBRL-enabled corporate governance reporting taxonomy: An empirical study of NYSE-listed financial institutions* (Doctoral thesis). University of Surrey, Guildford, United Kingdom. ISBN 3741205559, 9783741205552.

Benfield, J. A., & Szlemko, W. J. (2006). Research design: Internet-based data collection: Promises and realities. *Journal of Research Practice, 2*(2), D1-12.

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open, 2*, 8-14.

Berger, E. M., Koenig, G., Mueller, H., Schmidt, F., & Schunk, D. (2016). *Self-regulation training, labor market reintegration of unemployed individuals, and locus of control-evidence from a natural field experiment.* Berkeley: University of California Extension Media Center.

Bezuidenhout, M. (2011). The development and evaluation of a measure of graduate employability in the context of the new world of work (Doctoral dissertation). University of Pretoria, Pretoria.

Billet, S. (2011). *Curriculum and pedagogical bases for effectively integrating practice-based experiences*. Strawberry Hills, NSW: Australian Learning and Teaching Council (ALTC).

Blackmore, J. (2011). Lost in translation? Emotional intelligence, affective economies, leadership and organizational change. *Journal of Educational Administration and History, 43*(3), 207-225.

Boden, R., & Nedeva, M. (2010). Employing discourse: Universities and graduate employability. *Journal of Education Policy, 25*(1), 37-54.

Boer, H., Berger, A., Chapman, R., & Gertsen, F. (2017). *CI changes from suggestion box to organisational learning: Continuous improvement in Europe and Australia*. New York: Routledge.

Bollen, K. A. (1989). *Structural equations with latent variables* (Vol. 210) New York: John Wiley & Sons.

Bonett, D. G., & Wright, T. A. (2000). Sample size requirements for estimating Pearson, Kendall and Spearman correlations. *Psychometrika*, *65*(1), 23-28.

Boone, H. N., & Boone, D. A. (2012). Analyzing Likert data. *Journal of Extension, 50*(2), 1-5.

Bounfour, A. (Ed.) (2008). *Organisational capital: Modelling, measuring and contextualising.* New York: Routledge.

Boyatzis, R .E., Goleman, D., & Rhee, K. (2000). Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory (ECI). *Handbook of Emotional Intelligence, 99*(6), 343-362.

Boyatzis, R. (1982). *The competent manager: A model for effective performance*. New York: John Wiley & Sons.

Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development, 27*(1), 5-12.

Boyatzis, R. E. (2009). Competencies as a behavioral approach to emotional intelligence. *Journal of Management Development, 28*(9), 749-770.

Brains, C. J., Willnat, L., Manheim, J. B., & Rich, R. C. (2011). *Empirical political analysis* (*8th edition).* Boston, MA: Longman.

Bridgestock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development, 28*(1), 31-44.

British Psychological Society. (2011). Code of Human Research Ethics. Leicester. Available: http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf. Retrieval date: 26 March 2018

British Psychological Society. (2013). *Ethics guidelines for internet-mediated research.* Leicester: British Psychological Society. Retrieved from https://www.bps.org.uk/sites/

bps.org.uk/files/Policy/Policy%20-%20Files/Ethics%20Guidelines%20for%20Internet-mediated%20Research%20%282017%29.pdf. Retrieval date: 26 March 2018

Britton, N. R. (2001). A new emergency management for the new millennium? *Australian Journal of Emergency Management, 16*(4), 44-54.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*(4), 822.

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behaviour and Human Decision Processes*, *97*(2), 117-134.

Brown, T. A., 2014. *Confirmatory factor analysis for applied research*. New York City: Guilford Publications.

Brungardt, C. J. (2009). College graduates' perceptions of their use of teamwork skills: soft skill development in Fort Hays State University Leadership Education (Doctoral Thesis). North-western Oklahoma State University, Alva.

Bryant, F. B., & Yarnold, P. R. (1995). Principal-components analysis and exploratory and confirmatory factor analysis. In L. G. Grimm & P. R. Yarnold (Eds.), *Reading and understanding multivariate statistics* (pp. 99 –136). Washington, DC: American Psychological Association.

Bryman, A. (2008). Why do researchers integrate/combine/mesh/blend/mix/merge/fuse quantitative and qualitative research? *Advances in Mixed Methods Research, 1*, 87-100.

Burke, C. (2015). *Culture, capital and graduate futures: Degrees of class*. London: Routledge, London.

Caballero, C. L., Walker, A., & Fuller-Tyszkiewicz, M. (2011). The Work Readiness Scale (WRS): Developing a measure to assess work readiness in college graduates. *Journal of Teaching and Learning for Graduate Employability, 2*(2), 41-54.

Cai, Y. (2013). Graduate employability: A conceptual framework for understanding employers' perceptions. *Higher Education, 65*(4), 457-469.

Cantwell, B., & Kauppinen, I. (2014). *Academic capitalism in the age of globalisation.* Baltimore: The Johns Hopkins University Press.

Carayon, P. (2009). The balance theory and the work system model. Twenty years later. *International Journal of Human-Computer Interaction*, *25*(5), 313-327.

Carayon, P., Hancock, P., Leveson, N., Noy, I., Sznelwar, L., & Van Hootegem, G. (2015). Advancing a sociotechnical systems approach to workplace safety – Developing the conceptual framework. *Ergonomics, 58*(4), 548-564.

Carroll, A. B. (1979). A three-dimensional conceptual model of corporate social performance. *Academy of Management Review, 4,* 497-505.

CBI. Confederation of British Industry. (1999). *Making Employability Work: An Agenda for Action*. London: CBI.

Chan, S. (2013). Learning through Apprenticeship: Belonging to a Workplace, Becoming and Being. *Vocations and Learning*, *6*(3), 367–383.

Chaugai, V., Zakutney, T., Chan, A. D., & Adler, A. (2013). *Academic programs in clinical engineering in Canada*. CMBES Proceedings, 36.

Chen, Y. (2017). Graduate employability: The perspective of social network learning. *Eurasia Journal of Mathematics Science and Technology Education, 13*(6), 2567-2580.

Chen, Y. F., & Wu, T. C. (2007). An empirical analysis of core competence for high-tech firms and traditional manufacturers. *Journal of Management Development*, *26*(2), 159-168.

Chhinzer, N., & Russo, A.M. (2018). An exploration of employer perceptions of graduate student employability. *Education & Training*, *60*(1), 104-120.

Chinomona, E., & Mofokeng, T. (2017). Impact of leadership on organizational citizenship behaviour, organizational commitment and job performance: An application of leader-member exchange theory. *Corporate Ownership & Control*, *14*, 309-319.

Chiu, L. K., Mahat, N. I., Rashid, B., Razak, N. A., & Omar, H. (2016). Assessing students' knowledge and soft skills competency in the industrial training programme: The employers' perspective. *Review of European Studies*, *8*(1), 123-133.

Chmielecki, M., & Sułkowski, Ł. (2018). Cultural factors of trust in a public organization as a workplace. In Kozuch, Magala & Paliszkiewicz (Eds.), *Managing Public Trust* (pp. 99-114). New York: Palgrave Macmillan Cham.

Chomeya, R. (2010). Quality of psychology test between Likert scale 5 and 6 points. *Journal of Social Sciences, 6*(3), 399-403.

Cimatti, B. (2016). Definition, development, assessment of soft skills and their role for the quality of organizations and enterprises. *International Journal for Quality Research, 10*(1), 97-130.

Clarke, M. (2018). Rethinking graduate employability: The role of capital, individual attributes and context. *Studies in Higher Education, 43*(11), 1923-1937.

Clayton, T., & Radcliffe, N. (2018). *Sustainability: A systems approach*. London: Routledge.

Codrington, G. & Grant-Marshall, S. (2005). *Mind the Gap*. Johannesburg: Penguin Books.

Coetzee, M. (2008). Psychological career resources of working adults: A South African survey. *South African Journal of Industrial Psychology, 34*(2), 10-20.

Coetzee, M. (2012). A framework for developing student graduateness and employability in the economic and management sciences at the University of South Africa. *Developing student graduateness and*

employability: Issues, provocations, theory and practical guidelines, 1, 119-266. ISBN: 978-1-86922-189-8

Coetzee, M. (2014). Measuring student graduateness: Reliability and construct validity of the Graduate Skills and Attributes Scale. *Higher Education Research & Development, 33*(5), 887-902.

Coffield, F. (1998). A tale of three little pigs: building the learning society with straw. *Evaluation & Research in Education, 12*(1), 44-58.

Cole, M. S., Feild, H.S., Giles, W. F., & Harris, S. G. (2009). Recruiters' inferences of applicant personality based on resume screening: Do paper people have a personality? *Journal of Business and Psychology*, *24*(1), 5-18.

Collet, C., Hine, D., & Du Plessis, K. (2015). Employability skills: Perspectives from a knowledge-intensive industry. *Education + Training*, *57*(5), 532-559.

Conlon, E. (2008). The new engineer: Between employability and social responsibility. *European Journal of Engineering Education*, *33*(2), 151-159.

Copps, J., & Plimmer, D. (2013). *The journey to employment. A guide to understanding and measuring what matters to young people*. London: New Philanthropy Capital.

Côté, J. (2005). Identity capital, social capital and the wider benefits of learning generating resources facilitative of social cohesion. *London Review of Education, 3*(3), 221-237.

Côté, J. (2016). *The identity capital model: A handbook of theory, methods, and findings*. (Unpublished manuscript). Department of Sociology, The University of Western Ontario, London, Ontario, Canada.

Couper, M. R. (1984). The Delphi Technique: characteristics and sequence model. *Advances in Nursing Science, 7*, 72-77.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches (3rd edition*). Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th Edition).* Boston. MA: Pearson Education Inc.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2015). *A concise introduction to mixed methods research*. Thousand Oaks, CA: Sage Publications.

Creswell, J. W., & Plano Clark, V. (2007). *Designing and conducting mixed methods research* (1st ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. W., Hanson, W. E., Plano Clark, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counselling Psychologist*, *35*(2), 236-264.

Cronbach, L. J. (2004). My current thoughts on Coefficient Alpha and successor procedures. *Educational and Psychological Measurement, 64*, 391-418.

Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., & Ketchen Jr, D. J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology, 96*(3), 443.

Cruise, M. J. (2018). Eskom, too big to fail or necessitated change: Strategic decision making amidst organisational complexity within South Africa's state owned energy utility (Doctoral dissertation). University of Cape Town, Cape Town.

D'Agostino, R. B. (2017). *Goodness-of-fit-techniques*. New York: Routledge.

Dadzie, A., & Boachie-Mensah, A. G. (2011). Women, information technology and waves of optimism: Australian evidence on mixed-skill jobs. *Work and Employment, 22*(1), 21-33.

Darlington, J. D. (2008). *The profession of emergency management: Educational opportunities and gaps*. Western Illinois: University of Macomb.

Das, S. C., & Rao, S. (2016). Capabilities in employability skills (self-perceived) among under-graduate commerce students: A cross-sectional study. *The Indian Journal of Commerc*e, *68*(5), 110-122.

De Grip, A., Van Loo, J., & Sanders, J. (2004). The industry employability index: Taking account of supply and demand characteristics. *International Labour Review*, *143*, 211.

De Vos, A. S. (2005). Qualitative data analysis and interpretation. In A. S. de Vos (Ed.). *Research at grass roots: A primer for the caring professions*. Pretoria: JL van Schaik.

De Vos, A. S., & Strydom, H. (2011). Intervention research. In A. S. de Vos, H. Strydom, C. B. Fouché, & C. S. L Delport (Eds.), *Research at the grass roots for the social sciences and human service professions* (*3rd edition*, pp. 473-490). Pretoria: JL van Schaik Publishers.

Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behaviour. *Journal of Personality and Social Psychology, 53*(6), 1024-1037.

Deloitte Global & the Global Business Coalition for Education. (2018). *Preparing tomorrow's workforce for the Fourth Industrial Revolution For business: A framework for action.* Retrieved from https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-preparing-tomorrow-workforce-for-4IR.pdf. Retrieval date: 18 June 2017.

Delport, C. S. L. (2005). Quantitative data collection methods. In A. S. de Vos, H. Strydom, C. B. Fouché & C. S. L. Delport, *Research at the grass roots for the social sciences and human service professions* (*3rd edition*, pp. 159-191). Pretoria: JL van Schaik Publishers.

Deming, D. J. (2017). The value of soft skills in the labor market. *NBER Reporter*, (4), 7-11.

Denzin, N. K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research, 6*(2), 80-88.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research* (4th ed.). Los Angeles, CA: Sage Publications.

DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). Thousand Oaks, CA: Sage Publications.

Dey, I. (2003). *Qualitative data analysis: A user friendly guide for social scientists.* New York: Routledge.

Di Fabio, A., & Kenny, M .E. (2011). Promoting emotional intelligence and career decision making among Italian high school students. *Journal of Career Assessment, 19*(1), 21-34.

Di, Q., & Guo, J. H. (2010). *Organizational capital and organizational performance*. Shanghai Jiao Tong University Press, Shanghai, pp. 89-96.

Dillenbourg, P., & Betrancourt, M. (2006). Collaboration load. In J. Elen, & R. E. Clark, (Eds.), *Handling complexity in learning environments: Research and theory* (pp. 142-163). Oxford: Elsevier.

Donald, W. E, Baruch, Y., & Ashleigh, M. (2019). The undergraduate self-perception of employability: Human capital, careers advice, and career ownership, *Studies in Higher Education, 44*(4), 599-614.

Downe-Wamboldt, B. (1992). Content analysis: Method, applications, and issues. *Health Care for Women International*, *13*, 313-321.

Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives, 38*(1), 105.

Duval, S., & Wicklund, R. A. (1972). *A theory of objective self-awareness*. New York: Academic Press.

Ebrahimi, M., & Jahanian, R. (2014). Strategies to Increase the self- efficacy of educational administrators. *International Journal of Management and Sustainability, 3*(4), 250-260.

Edvinsson, L. (1997). Developing intellectual capital at Skandia. *Long Range Planning, 30*(3), 266-373.

Edwards, P., Roberts, I., Clarke, M., DiGuiseppi, C., Pratap, S., Wentz, R., & Kwan, I. (2002). Increasing response rates to postal questionnaires: Systematic review. *BMJ, 324*(7347), 1183.

Eisfeldt, A. L., & Papanikolaou, D. (2013). Organizational capital and the cross-section of expected returns. *Journal of Finance, 68(4)*, 1365-1406.

Elliott, A. C., & Woodward, W. A. (2007). *Statistical analysis quick reference guidebook: With SPSS examples*. Thousand Oaks, CA: Sage Publications.

Emmerling, R. J., & Boyatzis, R. E. (2012). Emotional and social intelligence competencies: Cross cultural implications. *Cross Cultural Management: An International Journal, 19*(1), 4-18.

Enikolopov, R., Petrova, M., & Sonin, K. (2018). Social media and corruption. *American Economic Journal: Applied Economics, 10*(1), 150-174.

Eskom. (2014). *Procedure for the Management of Learners.* Document Identifier: 240-42852660. Controlled disclosure.

Eskom. (2016). *Integrated Report.* Retrieved from http://www.eskom.co.za/IR2016/Documents/Eskom_integrated_report_2016.pdf. Retrieval date: 18 June 2017.

Eskom. (2017). *Procedure for Development.* Unique Identifier: 240-128258875. Controlled disclosure.

Eskom. (2018). *Integrated Report 2018* [Online] Retrieved from http://www.eskom.co.za/IR2018/Documents/Eskom2018IntegratedReport.pdf. Retrieval date: 26 May 2019.

Eskom. (2019). *Integrated Report 2019* [Online]. Retrieved from http://www.eskom.co.za/IR2019/Documents/Eskom_2019_integrated_report.pdf. Retrieval date: 14 September 2019.

Fahnert, B. (2015). On your marks, get set, go! – Lessons from the UK in enhancing employability of graduates and postgraduates. *FEMS Microbiology Letters, 362*(19), 1-6.

Fan, W., & Yan, Z. (2010) Factors affecting response rates of the web survey: A systematic review. *Computers in Human Behavior, 26*(2), 132-139.

Fang, C., Lee, J., & Schilling, M.A. (2010). Balancing exploration and exploitation through structural design: The isolation of subgroups and organizational learning. *Organization Science*, *21*(3), 625-642.

Ferris, G. R., Perrewé, P. L., Anthony, W. P., & Gilmore, D. C. (2003). Political skill at work. *Organizational Influence Processes*, *24*, 395-407.

Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). London: Sage.

Filippov, S. (2018). New technological revolution and energy requirements. *Форсайт*, *12*(4), 20–33.

Finch, D. F., Hamilton, L. K., Baldwin, R., & Zehner, M. (2013). An exploratory study of factors affecting undergraduate employability. *Education + Training, 55*(7), 681-70.

Finch, D. J., Peacock, M., Levallet, N., & Foster, W. (2016). A dynamic capabilities view of employability: exploring the drivers of competitive advantage for university graduates. *Education + Training, 58*(1), 61-81.

Fini, R., & Grimaldi, R. (2017). A multicountry, process-based approach to academic entrepreneurship. In D. Siegel, R. Fini & R. Grimaldi (Eds.),*The World Scientific Reference on Entrepreneurship: Volume 4: Process approach to academic entrepreneurship—Evidence from the globe* (pp. 1-17). New Jersey: World Scientific.

Fischer R. G. (1978) The Delphi method: A description, review, and criticism. *Journal of Academic Librarianship 4*, 64-70.

Flick, U., Von Kardorff, E., & Steinke, I. (2004). *A companion to qualitative research*. New York: Sage Publications.

Flin, R., & O'Connor, P. (2017). *Safety at the sharp end: A guide to non-technical skills*. Florida: CRC Press.

Forrier, A., Verbruggen, M., & De Cuyper, N. (2015). Integrating different notions of employability in a dynamic chain: The relationship between job transitions, movement capital and perceived employability. *Journal of Vocational Behavior*, *89*, 56-64.

Forsythe, A. (2017). I doubt very seriously whether anyone will hire me: Factors predicting employability perceptions in higher education. *Cogent Psycho*logy*. 4*, 1–13.

Foss, N. J., & Knudsen, C. (2013). *Towards a competence theory of the firm*. New York: Routledge.

Fotopoulos, C. B. & Psomas, E. L. (2009). The impact of "soft" and "hard" TQM Elements on quality management results. *International Journal of Quality and Reliability Management*, *26*, 150-163.

Frost and Sullivan Consultancy. (2015). *World's top global megatrends to 2025 and implications.* Retrieved from https://www.slideshare.net/polenumerique33/frost-sullivan-worlds-top-global-mega-trends-to-2025-and-implications. Retrieval date: 18 June 2017.

Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions and applications. *Journal of Vocational Behavior, 65*, 14-38.

Gallagher, M. W., & Lopez, S. J. (2009). Positive expectancies and mental health: Identifying the unique contributions of hope and optimism. *The Journal of Positive Psychology*, *4*(6), 548-556.

Ganzarain, J., & Errasti, N. (2016). Three stage maturity model in SME's toward industry 4.0. *Journal of Industrial Engineering and Management (JIEM), 9*(5), 1119-1128.

Ganzel, R. (2001). Hard training for soft skills. *Training*, *38*(6): 56-60.

Gardenier, J., & Resnik, D. (2002). The misuse of statistics: Concepts, tools, and a research agenda. *Accountability in Research: Policies and Quality Assurance*, *9*(2), .65-74.

Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences*. London: Hachette UK.

Gardner, W. L., & Martinko, M. J. (2016). Using the Myers-Briggs Type Indicator to study managers: A literature review and research agenda. *Journal of Management, 22*(1), 45-83.

Garkovich, L. E., Bunch, K., & Davis, J. T. (2016). The role of experiential education: An analysis from students' perspective. *NACTA Journ*al, *60*(4), 441-446.

Garson, D. (2010). *Statnotes: Topics in multivariate analysis: Factor analysis.* Retrieved from http://faculty.chass.ncsu.edu/garson/pa765/statnote.htm. Retrieval date: 18 June 2017.

Gazier, B. (1998). Employability: Definitions and trends, in B. Gazier, (Ed.) *Employability: Concepts and Policies*, (pp. 37 –71). Berlin: European Employment Observatory.

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology and Metabolism*, *10*(2), 486.

Gibbons, F. X. (1983). Self-attention and self-report: The "veridicality" hypothesis. *Journal of Personality*, *51*(3), 517-542.

Goldberg L. R (1993). The structure of phenotypic personality traits. *The American Psychologist, 48*(1), 26-34.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ.* New York: Bantam Books.

Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.

Goleman, D. (2001). An EI-based theory of performance. In C. Cherniss, & D. Goleman (Eds.), *The emotionally intelligent workplace* (pp. 27-44). New York: Jossey-Bass.

Goleman, D. (2006) *Social intelligence: the new science of social relationships*. New York: Bantam Books.

Goleman, D., & Boyatzis, R. (2008). Social intelligence and the biology of leadership. *Harvard Business Review, 86*(9), 74-81.

Grant, J. S., & Davis, L. L. (1997). Selection and use of content experts for instrument development. *Research in Nursing & Health*, *20*(3), 269-274.

Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California Management Review*, *33*(3), 114-135.

Greenberg, J., & Baron, R. A. (2008). *Behaviour in Organizations* (9th Ed). Upper Saddle River: New Jersey, Pearson Prentice Hall.

Grinnell, R. Jr. (Ed.). (1993). *Social work, research and evaluation* (*4th edition*). Illinois: F. E. Peacock Publishers.

Grootaert, C., & Van Bastelaer, T. (2002). *Understanding and measuring social capital – A multidisciplinary tool for practitioners*, 305. Washington: The World Bank; 2002. Retrieved from https://openknowledge.worldbank.org/handle/10986/14098. Retrieval date: 3 September 2018.

Grubbs, F. E. (1969). Procedures for detecting outlying observations in samples. *Technometrics*, *11*(1), 1-21.

Gudivada, V., Apon, A., & Ding, J. (2017). Data quality considerations for big data and machine learning: Going beyond data cleaning and transformations. *International Journal on Advances in Software*, *10*(1), 1-20.

Guglielmi, D. (2015). *Employability: Competences to manage boundaryless careers.* Speech at Workshop on Soft Skills and their role in employability – New perspectives in teaching, assessment and certification, Bertinoro, FC, Italy. (November).

Gupta, M., Shaheen, M., & Reddy, P. K. (2017). Impact of psychological capital on organizational citizenship behavior: Mediation by work engagement. *Journal of Management Development, 36*(7), 973-983.

Habibi, A., Sarafrazi, A., & Izadyar, S. (2014). Delphi technique theoretical framework in qualitative research. *The International Journal of Engineering and Science (IJES), 3*(4), 8-13.

Halcomb, E., & Hickman, L. (2015). Mixed methods research. *Nursing Standard: Promoting Excellence in Nursing Care, 29*(32), 41-47.

Halfhill, T. R., & Nielsen T. M. (2007). Quantifying the 'softer side' of management education: An example using teamwork competencies. *Journal of Management Education, 31*(1), 64-80.

Han, S., & Kemple, K. (2006). Components of social competence and strategies of support: Considering what and how to teach. *Early Childhood Education Journal, 34*(3), 241-246.

Hannula, L. (2018). Graduate employment in the era of globalisation: Challenges, opportunities, and what Finnish tertiary education could learn from the UK (BBA thesis). Metropolia University of Applied Sciences, Helsinki.

Harpe, S. E. (2015). How to analyze Likert and other rating scale data. *Currents in Pharmacy Teaching and Learning*, *7*(6), 836-850.

Harvey, L. (2001). Defining and measuring employability. *Quality in Higher Education, 7*(2), 97-109.

Hassan, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing, 32*(4), 1008-1015.

Hasslöf, H., Lundegård, I., & Malmberg, C., 2016. Students' qualification in environmental and sustainability education – Epistemic gaps or composites of critical thinking? *International Journal of Science Education*, *38*(2), 259-275.

Hasson, F., & Keeney, S. (2011). Enhancing rigour in the Delphi technique research. *Technological Forecasting and Social Change*, *78*(9), 1695-1704.

Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing*, *32*(4), 1008-1015.

Hauer, T. (2016). Speed as a new dimension of globalization. *Arts Social Sciences Journal, 7*, 193. doi:10.4172/2151-6200.1000193.

Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-based Nursing, 18*(3), 66-67.

Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics*, *19*(4), 451-464.

Heiman, T. (2001). Inclusive schooling-middle school teachers' perceptions. *School Psychology International*, *22*(4), 451-462.

Hendon, M., Powell, L., & Wimmer, H. (2017). Emotional intelligence and communication levels in information technology professionals. *Computers in Human Behaviour*, *71*, 165-171.

Henkel, M. (2005). Academic identity and autonomy in a changing policy environment. *Higher Education, 49*(1/2), 155-76.

Hess, S., Hensher, D. A., & Daly, A. (2012). Not bored yet–revisiting respondent fatigue in stated choice experiments. *Transportation research part A: policy and practice*, *46*(3), 626-644.

Hillage, J., & Pollard, E. (1998). *Employability: Developing a framework for policy analysis*. Research Brief 85, Department for Education and Employment, London.

Hinchliffe, G., & Jolly, A. (2011). Graduate identity and employability. *British Educational Research Journal, 37*(4), 563-584.

Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods, 1*, 104-121.

Hodges, D., Eames, C., & Coll, R. (2014). Theoretical perspectives on assessment incooperative education placements. *Asia-Pacific Journal of Cooperative Education, 15*(3), 189-207.

Hoeschl, M. B., Bueno, T. C., & Hoeschl, H. C. (2017). Fourth Industrial Revolution and the future of engineering: Could robots replace human jobs? How ethical recommendations can help engineers rule on artificial intelligence. In 2017 7th World Engineering Education Forum (WEEF), November (pp. 21-26). IEEE.

Hogan, R., Chamorro-Premuzic, T., & Kaiser, R. B. (2013). Employability and career success: Bridging the gap between theory and reality. *Industrial and Organizational Psychology, 6*, 3-16.

Holmes, L. (2001). Reconsidering graduate employability: The 'graduate identity' approach. *Quality in Higher Education, 7*(2), 111-119.

Holmes, L. (2013). Competing perspectives on graduate employability: Possession, position or process? *Studies in Higher Education, 38*(4), 538-554.

Holmes, L. (2015). Becoming a graduate: The warranting of an emergent identity. *Education + Training, 57*(2), 219-238.

Hosseini, S. N., Alavijeh, M. M., Matin, B. K., Hamzeh, B., Ashtarian, H., & Jalilian, F. (2016). Locus of control or self-esteem: Which one is the best predictor of academic achievement in Iranian college students. *Iranian Journal of Psychiatry and Behavioral Sciences, 10*(1), 2602.

Howard, M. C. (2016). A review of exploratory factor analysis decisions and overview of current practices: What we are doing and how can we improve? *International Journal of Human-Computer Interaction*, *32*(1), 51-62.

Howe, M. J. A. (2001). *Genius explained*. Cambridge: Cambridge University Press.

Howell, D. C. (2002). *Statistical methods for psychology* (*5th edition*). Pacific Grove, CA: Duxbury.

HSRC. Human Sciences Research Council. (1997). *Code of Research Ethics*. Retrieved from http://www.hsrc.ac.za/en/about/research-ethics/code-of-research-ethics. Retrieval date: 18 June 2017.

Hsu, C. C., & Sandford, B. A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research & Evaluation*, *12*(10), 1-8.

Huq, A., & Gilbert, D. H. (2013). Enhancing graduate employability through work-based learning in social entrepreneurship: A case study. *Education + Training, 55*(6), 550-572.

Hurrell, S. A. (2016). Rethinking the soft skills deficit blame game: Employers, skills withdrawal and the reporting of soft skill gaps. *Human Relations, 69*(3), 605-628.

Hutchinson, M., & Hurley, J., 2013. Exploring leadership capability and emotional intelligence as moderators of workplace bullying. *Journal of Nursing Management*, *21*(3), 553-562.

Ibarraran, P., Ripani, L., Taboada, B., Villa, J.M., & Garcia, B. (2014). Life skills, employability and training for disadvantaged youth: Evidence from a randomized evaluation design. *IZA Journal of Labor & Development*, *3*(1), 10.

Ilieva-Trichkova, P. (2014). A capability perspective on employability of higher education graduates in Bulgaria, *Social Work & Society Journal, 12*(2), 1-18.

ILO. International Labour Organisation. (2019). *World Employment and Social Outlook – Trends 2019*. Retrieved from https://www.ilo.org/global/research/global-reports/weso/ 2019/lang--en/index.htm. Retrieval date: 27 October 2019.

Ismail, S., Ferreira, N., & Coetzee, M. (2016). Young emerging adults' graduateness and career adaptability: Exploring the moderating role of self-esteem. *Journal of Psychology in Africa, 26*(1), 1-10.

Ivankova, N. V., Creswell, J. W., & Plano Clark, V. L. (2007). Foundations and approaches to mixed methods research. In K. Maree (Ed.). *First steps in research*. Cape Town: Van Schaik.

Jackson, D. (2009). An international profile of industry-relevant competencies and skill gaps in modern graduates. *International Journal of Management Education, 8*(3), 29-58.

Jackson, D. (2013). Student perceptions of the importance of employability skill provision in business undergraduate programs. *Journal of Education for Business, 88*(5), 271.

Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education, 40*(2), 350-367.

Jackson, D. (2016). Re-conceptualising graduate employability: The importance of pre-professional identity. *Higher Education Research & Development, 35*(5), 925-939.

Jackson, D. (2017). Exploring the challenges experienced by international students during work-integrated learning in Australia. *Asia Pacific Journal of Education, 37*(3), 344-359,

Jackson, D., & E. Chapman. (2012). Non-technical skill gaps in business graduates. *Education+ Training, 54*(2/3), 95-113.

Jackson, D., & Wilton, N. (2016). Developing career management competencies among undergraduates and the role of work-integrated learning. *Teaching in Higher Education, 21*(3), 266-286.

Jackson, D., & Wilton, N. (2017). Perceived employability among undergraduates and the importance of career self-management, work experience and individual characteristics. *Higher Education Research & Development*, *36*(4), 747-762.

Jasti, N. V. K., Sharma, A., & Karinka, S. (2015). Development of a framework for green product development. *Benchmarking: An International Journal, 22*(3), 426-445.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14-26.

Jonck, P., & Minnaar, R. (2015). Validating an Employer Graduate-Employability Skills Questionnaire in the Faculty of Management Sciences. *Mediterranean Journal of Social Sciences, 6*(2S1), 230-237.

Jones, P., & Upward, A. (2014). *Caring for the future: The systemic design of flourishing enterprises.* In: Proceedings of RSD3, Third Symposium of Relating Systems Thinking to Design, 15-17 Oct 2014, Oslo, Norway.

Jones, S., Mann, A., & Morris, K. (2016), The 'employer engagement' cycle in secondary education: Analysing the testimonies of young British adults. *Journal of Education and Work, 29*(7), 834-856.

Jung, C. G. (2014). *The development of personality*. New York: Routledge.

Jurkiewicz, C. L., & Giacalone, R. A. (2016). Organizational determinants of ethical dysfunctionality. *Journal of Business Ethics, 136*(1), 1-12.

Kabir, S. M. S. (2018) *Basic guidelines for research: An introductory approach for all disciplines, (1st edition).* Bangladesh: Book Zone Publication.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33*(4), 692-724.

Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika, 35*(4), 401-415.

Kapareliotis, I., Voutsina, K., & Patsiotis, A. (2019). Internship and employability prospects: assessing student's work readiness. *Higher Education, Skills and Work-Based Learning, 9*(4), 538-549.

Karabulut, A. T. (2016). Personality traits on entrepreneurial intention. *Procedia – Social and Behavioral Sciences, 229*, 12-21.

Katz, R. L. (2009). *Skills of an effective administrator*. Boston: Harvard Business Review Press.

Kautz, T., Heckman, J. J., Diris, R., Ter Weel, B., & Borghans, L. (2014). *Fostering and measuring skills: Improving cognitive and non-cognitive skills to promote lifetime success* (W20749). Cambridge: National Bureau of Economic Research.

Kay, K., & Greenhill, V. (2011). *Twenty-first century students need 21st century skills. Bringing schools into the 21st century.* Netherlands: Springer.

Kazilan, F., Hamzah, R., & Bakar, A. R. (2009). Employability skills among the students of technical vocational training centers in Malaysia. *European Journal of Social Sciences, 9*(1), 147-160.

Kelly, R. (2019). Future-proofing organisations for Leadership 4.0. In *Constructing Leadership 4.0* (pp. 153-174). Palgrave: Macmillan, Cham.

Kenny, A., Cronje, F., Jeffery, A., Moloi, L., Dimant, T., Kane-Berman, J., Matsokotere, M., & Zwane, S. (2015). The rise and fall of Eskom – and how to fix it now. *Policy Bulletin*, *2*(18), 1-22.

Kerner, D., & Thomas, J. (2014). Resilience attributes of social-ecological systems: Framing metrics for management. *Resources*, *3*(4), 672-702.

Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, *14*(1), 1-26.

Khan, I., Khan, F., Khan, H., Nawaz, A., & Yar, N. B. (2013). Determining the demographic impacts on the organizational commitment of academicians in the HEIs of DCs like Pakistan. *European Journal of Sustainable Development, 2*(2), 117-130. doi:10.14207/ejsd.2013.v2n2p117

Khanna, T. (2014). Contextual intelligence. *Harvard Business Review, 92*(9), 58-68.

Khuong, C. T. H. (2016). Work-integrated learning process in tourism training programs in Vietnam: Voices of education and industry. *Asia-Pacific Journal of Cooperative Education, 17*(2), 149-161.

Kim, M., & Aktan, T. (2014). How to enlarge the scope of the curriculum integration of mathematics and science (CIMAS): A Delphi study. *Eurasia Journal of Mathematics, Science, & Technology Education, 10*(5), 455-469.

King, D. D., Newman, A., & Luthans, F. (2016). Not if, but when we need resilience in the workplace. *Journal of Organizational Behavior, 37*(5), 782-786.

King, Z. (2004). Career self-management: Its nature, causes and consequences. *Journal of Vocational Behavior*, *65*(1), 112-133.

Knight, P., & Yorke, M. (2002). Employability through the curriculum. *Tertiary Education and Management, 8*, 261–276.

Knight, P., & Yorke, M. (2004). *Learning, curriculum and employability in higher education*. London: Routledge Falmer.

Kokko, K., Bergman, L. R., & Pulkkinen, L. (2003). Child personality characteristics and selection into long-term unemployment in Finnish and Swedish longitudinal samples. *International Journal of Behavioral Development, 27*(2), 134-144.

Kolb, D. A. (1984). Experiential learning: *Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice-Hall.

Kunze, F., Boehm, S., & Bruch, H. (2013). Age, resistance to change, and job performance. *Journal of Managerial Psychology, 28*(7/8), 741-760.

Kusmintarti, A., Thoyib, A., Maskie, G., & Ashar, K. (2016). Entrepreneurial characteristics as a mediation of entrepreneurial education influence on entrepreneurial intention. *Journal of Entrepreneurship Education, 19*(1), 24.

Kwach, J. (2019). *Briefly: Facts on unemployment in South Africa*. Retrieved from https://briefly.co.za/23795-facts-unemployment-south-africa.html#23795. Retrieval date: 18 October 2019.

Lairio, M., Puukari, S., & Kouvo, A. (2013). Studying at university as part of student life and identity construction. *Scandinavian Journal of Educational Research, 57*(2), 115-131.

Lau, P. L., Wilkins-Yel, K. G., & Wong, Y. J. (2019). Examining the indirect effects of self-concept on work readiness through resilience and career calling. *Journal of Career Development, May,19,*, 1-14. May 19:0894845319847288.

LaVan, H., & Martin, W. M. (2008). Bullying in the US workplace: Normative and process-oriented ethical approaches. *Journal of Business Ethics*, *83*(2), 147-165.

Le Deist, F. D., & Winterton, J. (2005). What is competency? *Human Resource Development International*, *8*(1), 27-46.

Legendre, P. (2005). *Species Associations: The Kendall Coefficient of Concordance Revisited.* Retrieved from http://www.uvm.edu/pdodds/files/papers/others/2005/ legendre2005a.pdf. Retrieval date: 18 June 2017.

Lev, B., Radhakrishnan, S., & Zhang, W. (2009), Organization capital. *Abacus, 45*(3), 275-98. doi.org/10.1111/j.1467-6281.2009.00289.

Levasseur, R. E. (2013). People skills: Developing soft skills – A change management perspective. *Interfaces*, *43*(6), 566-571.

Levine, S. S., Bernard, M., & Nagel, R. (2017). Strategic intelligence: The cognitive capability to anticipate competitor behaviour. *Strategic Management Journal, 38*(12), 2390-2423.

Lewin, K. (1951). *Field theory in social science*. Harper and Row, New York.

Lewis, C. (1992). Making sense of common sense: A framework for tracking hegemony. *Critical Studies in Media Communication*, *9*(3), 277-292.

Lewis, K. V. (2016). Identity capital: an exploration in the context of youth social entrepreneurship. *Entrepreneurship & Regional Development, 28*(3-4), 191-205.

Li, Z. (2017). International students' employability: What can we learn from it? In M. Tomlinson, Michael & L.Holmes (Eds.), *Graduate employability in context* (pp. 195-211). London: Palgrave Macmillan.

Liau, A. K., Liau, A. W., Teoh, G. B., & Liau, M. T. (2003). The case for emotional literacy: the influence of emotional intelligence on problem behaviours in Malaysian secondary school students. *Journal of Moral Education, 32*(1), 51-66.

Lichtenstein, G., Thorme, T., Cutforth, N. J., & Tombari, M. L. (2011). *Development of a national survey to assess student learning outcomes of community-based research*. University of Denver, Digital Commons @ DU.

Lievens, F., & Chan, D. (2017). Practical intelligence, emotional intelligence, and social intelligence. In J.L Farr & N.T. Tippens (Eds.), *Handbook of employee selection* (pp. 342-364). New York: Routledge.

Lindell, M. K., Prater, C., & Perry, R. W. (2006). *Wiley pathways introduction to emergency management*. Boston:John Wiley & Sons.

Linstone, H. A., & Turoff, M. (Eds.). (2002). *The Delphi method: Techniques and applications*. Retrieved from https://web.njit.edu/~turoff/pubs/delphibook/ delphibook.pdf. Retrieval date: 28 August 2019.

Lippman, L. H., Ryberg, R., Carney, R., & Moore, K. A. (2015). *Workforce Connections: Key "soft skills" that foster youth workforce success: Toward a consensus across fields*. Washington, DC: Child Trends.

Livesey, P.V. (2017). Goleman-Boyatzis model of emotional intelligence for dealing with problems in project management. *Construction Economics and Building, 17*(1), 20.

Lotecka, L. (1974). A project advocating humanistic education: An evaluation of its effect on public school teachers. *Journal of Drug Education*, *4*(2), 141-149.

Lowden, K., Hall, S., Elliot, D., & Lewin, J. (2011). *Employer's perceptions of the employability skills of new graduates*. Research commissioned by the Edge Foundation. University of Glasgow.

Lucia, A. D., & Lepsinger, R. (1999). *The art and science of competency models: Pinpointing critical success factors in organizations*. San Francisco: Jossey-Bass.

Luthans F., Youseff, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. New York: Oxford University Press.

Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, *23*(6), 695-706.

Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly, 21*(1), 41-67.

Luthans, F., Youssef-Morgan, C. M., & Avolio, B. J. (2015). *Psychological capital and beyond*. Oxford University Press, New York, NY.

Madsen, S. R., Miller, D., & John, C. R. (2005). Readiness for organizational change: Do organizational commitment and social relationships in the workplace make a difference? *Human Resource Development Quarterly*, *16*(2), 213-234.

Mahasneh, J. K., & Thabet, W. (2016). Developing a normative soft skills taxonomy for construction. *Journal of Civil Engineering and Architecture Research, 3*(5), 1468-1486.

Maon, F., Lindgreen, A., & Swaen, V. (2009). Designing and implementing corporate social responsibility: An integrative framework grounded in theory and practice. *Journal of Business Ethics, 87*(1), 71-89.

Mardani, A., Jusoh, A., Nor, K., Khalifah, Z., Zakwan, N., & Valipour, A. (2015). Multiple criteria decision-making techniques and their applications – A review of the literature from 2000 to 2014. *Economic Research-Ekonomska Istraživanja*, *28*(1), 516-571.

Maree, K. (2007). *First steps in research.* Pretoria, South Africa: Van Schaik Publishers.

Maree, K., & Van der Westhuizen, C. N. (2009). *Head start in designing research proposals in the social sciences*. Claremont: Juta.

Marquardt, M. J. (2000). Action learning and leadership. *The Learning Organization*, *7*(5), 233-241.

Martin, G. S., Resick, C. J., Keating, M. A., & Dickson, M. W. (2009). Ethical leadership across cultures: A comparative analysis of German and US perspectives. *Business Ethics: A European Review*, *18*(2), 127-144.

Mashigo, A. C. L. (2014). *Factors influencing work readiness of graduates: An exploratory study* (Doctoral dissertation). Stellenbosch University, Stellenbosch.

Maslach, C., & Leiter, M. P. (2016). Burnout. In G. Fink (Eds.), *Stress: Concepts, cognition, emotion, and behavior* (pp. 351-357). Cambridge, Massachusetts: Academic Press.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370.

Masole, L., & Van Dyk, G. (2016). Factors influencing work readiness of graduates: An exploratory study. *Journal of Psychology in Africa*, *26*(1), 70-73.

Mason, G., Williams, G., & Crammer, S. (2009). Employability skills initiatives in higher education: What effects do they have on graduate labour market outcomes? *Education Economics, 17*(1), 1-30.

Matić, J. L., & Agušaj, B. (2012). The alignment of hospitality education with industry needs in transitional countries: The case of Croatia. *Revista de turism-studii si cercetari in turism*, (14), 19-27.

Matsouka, K., & Mihail, D. M. (2016). Graduates' employability: What do graduates and employers think? *Industry and Higher Education, 30*(5), 321-326.

Matteson, M., Anderson, L., & Boyden, C. (2016). Soft skills. A phrase in search of meaning. *Libraries and the Academy*, *16*(1), 71-88.

Matthews, G., Zeidner, M., & Roberts, R. D. (2012). *Emotional intelligence 101*. New York: Springer Publishing Company.

Matthiesen, S. B., & Einarsen, S. (2010). Bullying in the workplace: Definition, prevalence, antecedents and consequences. *International Journal of Organization and Behavior, 13*(2), 202-248.

Matthiesen, S. B., & Einarsen, S., 2015. Perpetrators and targets of bullying at work: Role stress and individual differences. In R.D. Maiuro (Eds.), *Perspectives on Bullying: Research on Childhood, Workplace, and Cyberbullying*, (pp. 135-154). New York: Springer Publishing Company,LLC.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Implications for educators* (pp. 3-31). New York: Basic Books.

Mayer, J. D., Caruso, D.R., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. *Emotion Review*, *8*(4), 290-300.

Mayer, J. D., Salovey, P., & Caruso, D. (2000). Models of emotional intelligence. In R. J. Sternberg (Ed.), *Handbook of intelligence* (pp. 396-420). New York: Cambridge.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, *15*, 197- 215.

Mbah, N. (2018). Nigeria, GBC Education, Youth Skills and Innovation Initiative: Youth network as in Deloitte. Preparing tomorrow's workforce for the Fourth Industrial Revolution for business: A framework for action. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-preparing-tomorrow-workforce-for-4IR.pdf. Retrieval date: 23 July 2019.

McClelland, D. C. (1973). Testing for competence rather than intelligence. *American Psychologist, 28*, 1-14.

McEntire, D. A. (2007). Local emergency management organizations. In H. Rodríguez, E. L. Quarantelli, & R. R. Dynes (Eds.), *Handbook of disaster research* (pp. 168-182). New York: Springer.

McKinsey Centre for Government. (2012). Education to employment: Designing a system that works. The nine countries: Brazil, Germany, India, Mexico, Morocco, Saudi Arabia, Turkey, UK and US. Retrieved from http://www.mckinsey.com/industries/social-sector/our-insights/education-to-employment-designing-a-system-that-works. Retrieval date: 18 June 2017.

McKinsey Global Institute. (2018). *Skill Shift Automation and the Future of the Workforce*. Retrieved from https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Skill%20shift%20Automation%20and%20the%20future%20of%20the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx. Retrieval date: 13 May 2019.

McLagan, P. (1996). Great ideas revisited. *Training & Development, 50*, 60-64.

McMillan, J., & Schumacher, S. (2006). *Research in education: Evidence based inquiry* (*6th edition*). Boston: Pearson Education.

McNeil, J. (2017). Top management team characteristics, organisational design and financial performance of publically traded companies on the JSE Altx (Doctoral dissertation). University of Pretoria, Pretoria.

McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban Studies, 42*(2), 197-219.

McQuaid, R. W., Green, A., & Danson, M. (2005). Introducing employability. *Urban Studies, 42*(2), 191-195.

Melink, M., & S. Pavlin. (2012). *Employability of graduates and higher education management systems.* Final Report of DEHEMS Project. Slovenia: University of Ljubljana.

Merow, C., Smith, M. J., & Silander Jr, J. A. (2013). A practical guide to MaxEnt for modeling species' distributions: What it does, and why inputs and settings matter. *Ecography*, *36*(10), 1058-1069.

Meshkat, M., & Nejati, R. (2017). Does emotional intelligence depend on gender? A study on undergraduate English majors of three Iranian universities. *Sage Open, 7*(3), 215.

Metzger, S. (2004). Employers' perceptions of the benefits of college internship programs. *Journal of Cooperative Education, 38*(1), 45-52.

Meyer, A. D., Brooks, G. R., & Goes, J. B. (1990). Environmental jolts and industry revolutions: Organizational responses to discontinuous change. *Strategic Management Journal*, *11*, 93-110.

Meyer, M. H., & Bushney, M. J. (2008). Towards a multi-stakeholder-driven model for excellence in higher education curriculum development. *South African Journal of Higher Education, 22*(6), 1229-1240.

Mills, J., Platts, K., & Bourne, M. (2003). Competence and resource architectures. *International Journal of Operations & Production Management, 23*(9), 977–994.

Mokyr, J. (2018). Editor's introduction: The new economic history and the Industrial Revolution. In J. Mokyr (Eds.), *The British industrial revolution* (pp. 1-127). New York: Routledge.

Morgan, D. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research, 1*, 48-7.

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counselling psychology. *Journal of Counselling Psychology, 52*(2), 250.

Morse, J. M., & Niehaus, L. (2009). *Mixed method design: Principles and procedures*. Walnut Creek, CA: Left Coast Press.

Morton, S. M., Bandara, D. K., Robinson, E. M., & Carr, P. E. A. (2012). In the 21st century, what is an acceptable response rate? *Australian and New Zealand Journal of Public Health*, *36*(2), 106-108.

Mulder, M. (2017). A Five-component Future Competence (5CFC) Model. *The Journal of Agricultural Education and Extension, 23*(2), 99-102.

Mumford, E. (2006). The story of socio-technical design: Reflections on Its successes, failures and potential. *Information Systems Journal, 16*(4), 317-342.

Mustapha, M., & Selvaraju, M. (2015). Personal attributes, family influences, entrepreneurship education and entrepreneurship inclination among university students. *Kajian Malaysia: Journal of Malaysian Studies*, *33*, 155-172.

Myers, I.B., McCaulley, M.H., Quenk, N.L. & Hammer, A.L. (1998). *MBTI manual: A guide to the development and use of the Myers-Briggs Type Indicator* (*Vol. 3*). Palo Alto, CA: Consulting Psychologists Press.

Myers, LB., & McCaulley, M.H. (1985). *Manual: A guide to the development and use of the Myers-Briggs Type Indicator.* Palo Alto, CA: Consulting Psychologists Press.

Navas, M. S., & Vijayakumar, M. (2018). Emotional intelligence: A review of emotional intelligence effect on organizational commitment, job satisfaction and job stress. *International Journal of Advanced Scientific Research & Development (IJASRD), 5*(6), 01-07.

Neal, A., Yeo, G., Koy., A., & Xiao, T. (2012). Predicting the form and direction of work role performance from the Big 5 model of personality traits. *Journal of Organizational Behavior, 33*(2), 175-192.

Neumann, G. (2017). *Knowledge Management 4.0 – Implications of the fourth industrial revolution on knowledge management in supply chains*. Paper presented at International Conference Theory and Applications in the Knowledge Economy (TAKE), Zagreb, Croatia, 12 to 14 July 2017.

Ng, K. Y., Van Dyne, L., & Ang, S. (2019). Speaking out and speaking up in multicultural settings: A two-study examination of cultural intelligence and voice behavior. *Organizational Behavior and Human Decision Processes, 151*, 150-159.

Ng, T .W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objectives and subjective career success: A meta-analysis. *Personnel Psychology, 58*(2), 367-408.

Ngoma, M., & Ntale, P.D. (2016). Psychological capital, career identity and graduate employability in Uganda: The mediating role of social capital. *International Journal of Training and Development*, *20*(2), 124-139.

Ngulube, P. (2015). Trends in research methodological procedures used in knowledge management studies. *African Journal of Library, Archives and Information Science*, *25(2*), 125-143.

Nhede, N. (2018). The Fourth Industrial Revolution and novel skills needed for the public sector. In M.S. de Vries, G. van Dijk, & M. Chitiga-Mabugu (Eds.), *Public administration: Reflection, relevance and readiness* (pp. 201-215). Ed. Bratislava: NISPAcee Press. ISBN 978-80-89013-98-2.

NHREC. National Health Research Ethics Council. (2011) Ethical-legal protection for vulnerable research participants in South Africa. An audit of relevant laws and ethical guidelines. Retrieved from http://www.nhrec.org.za/wp-content/uploads/2011/ ethicalguidelines.pdf. Retrieval date: 7 March 2017.

Nienaber, A. G. (2013). Consent to research by mentally ill children and adolescents: The implications of Chapter 9 of the National Health Act. *South African Journal of Psychiatry, 1*(19), 5-11.

Nieuwenhuis, J. (2007). Qualitative research designs and data gathering techniques. In K. Maree (Ed.), *First steps in research* (pp. 69-97). Pretoria: Van Schaik.

Nilsson, S. (2010). Enhancing individual employability: The perspective of Engineering graduates. *Education + Training, 52*(6/7), 540-551.

Noar, S. M. (2003). The role of structural equation modeling in scale development. *Structural Equation Modeling, 10*(4), 622-647.

Nunnally, J. C. (1978). *Psychometric theory* (*2nd edition*). New York, NY: McGraw-Hill.

O'Cathain, A., Murphy, E., & Nicholl, J. (2010). Three techniques for integrating data in mixed methods studies. *BMJ*, 341, c4587.

OECD. (2015). *OECD skills outlook 2015: Youth, skills and employability,* OECD Publishing. Retrieved from https://read.oecd-ilibrary.org/education/oecd-skills-outlook-2015_9789264234178-en. Retrieval date: 8 March 2017.

Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: An example, design considerations and applications. *Information Management, 42*(1), 15-29.

Oliveira, N., & Takahashi, N. (2012). Automated organizations: Development and structure of the modern business firm. New York, NY: Springer.

Oliver, B. (2011). *Assuring graduate outcomes: Good practice report*. Sydney, NSW: Australian Learning and Teaching Council.

Olsen, W. (2004). Triangulation in social research: Qualitative and quantitative method can really be mixed. In M. Holborn (Ed.), *Developments in Sociology* (pp. 103-118). Ormskirk: Causeway Press.

Onwuegbuzie, A. J., Bustamante, R. M., & Nelson, J. A. (2010). Mixed research as a tool for developing quantitative instruments. *Journal of Mixed Methods Research, 4*(1), 56-78.

Oosthuizen, J. (2017). The determinants of fourth industrial revolution leadership dexterity: A proposed framework for 4IR intelligence and subsequent 4IR leadership development. Conference paper presented at the 4th International Conference on Responsible Leadership at GIBS, Johannesburg.

Orb, A., Eisenhauer, L., & Wynaden, D. (2001). Ethics in qualitative research. *Journal of Nursing Scholarship*, *33*(1), 93-96.

Oriarewo, G.O., Ofobruku, S.A., Agbaezee, K. & Tor, Z.A. (2018). The Influence of emotional stability on employees' performance: A review. *South Asian Journal of Social Studies and Economics*, *2*(1), 1-8.

Osmani, M., Hindi, N., Al-Esmail, R., & Weerakkody, V. (2017).Examining graduate skills in accounting and finance: The perception of Middle Eastern students. *Industry and Higher Education, 31*(5), 318-327.

Ostrom, E. (2005). *Understanding institutional diversity*. Princeton, NJ, USA: Princeton University Press.

Ostrom, E., (2010). Beyond markets and states: Polycentric governance of complex economic systems. *American Economic Review, 100*(3), 641-72.

Palaima, T., & Skaržauskienė, A. (2010) Systems thinking as a platform for leadership performance in a complex world. *Baltic Journal of Management*, *5*(3), 330-355.

Pandey, M., & Pandey, P. (2015). Global employability of unemployed youth through soft skills. *International Journal of Multidisciplinary Approach & Studies*, *2*(2), 73-77.

Papadopoulos, T., & Armatas, C. (2013). Evaluation of an ICT skills program: Enhancing graduate capabilities and employability. *International Journal of Electronic Commerce Studies, 4*(1), 93-102.

Pathirage, C., Seneviratne, K., Amaratunga, D., & Haigh, R. (2012). Managing disaster knowledge: Identification of knowledge factors and challenges. *International Journal of Disaster Resilience in the Built Environment, 3*(3), 237-252.

Patton, M. Q. (2002). *Qualitative evaluation and research methods* (*3rd edition*). Thousand Oaks, CA: Sage Publications.

Peeters, E., Nelissen, J., De Cuyper, N., Forrier, A., Verbruggen, M., & De Witte, H. (2019). Employability capital: a conceptual framework tested through expert analysis. *Journal of Career Development*, *46*(2), 79-93.

Pellissier, R. (2008). *Business research made easy*. Claremont: Juta and Company Ltd.

Perrault, H. (2004). Business educators can take a leadership role in character education. *Business Education Forum, 59*(1), 23-24.

Peters, M. A. (2017). Technological unemployment: Educating for the fourth industrial revolution. *Educational Philosophy and Theory, 49*(1), 1-6.

Peto, L., & Geddert, C. (2014). Using career education to help students build and articulate employability skills. Proceedings of the Canadian Engineering Education Association (CEEA).

Petrillo, A., De Felice, F., Cioffi, R., & Zomparelli, F. (2018). *Digital transformation in smart manufacturing.* BoD–Books on Demand.

Petty, R. E., & Krosnick, J. A. (2014). *Attitude strength: Antecedents and consequences*. Road Hove, UK: Psychology Press.

Pindek, S., & Spector, P. E. (2016). Organizational constraints: A meta-analysis of a major stressor. *Work & Stress, 30*(1), 7-25.

Pitan, O. S. (2016). Towards enhancing university graduate employability in Nigeria. *The Journal of Sociology and Social Anthropology, 7*(1), 1-11.

Pitan, O. S., & Atiku, S. O. (2017). Structural determinants of students' employability: Influence of career guidance activities, *South African Journal of Education, 37*(4), 1-13.

Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual-and organizational-level consequences of organizational citizenship behaviours: A meta-analysis. *Journal of Applied Psychology*, *94*(1), 122.

Pool, L. D. (2017). Developing graduate employability: The CareerEDGE Model and the importance of emotional intelligence. In M. Tomlinson & L. Holmes (Eds.), *Graduate employability in context* (pp. 317-338). London: Palgrave Macmillan.

Pool, L. D., & Sewell, P. (2007). The key to employability: Developing a practical model of graduate employability. *Education + Training*, *49*, 277-289.

Porath C. L., & Pearson, C. M. (2013). The price of incivility: Lack of respect hurts morale and the bottom line. *Harvard Business Review, 91*, 115-121.

Porath, C. L., & Bateman, T. S. (2006). Self-regulation: From goal orientation to job performance. *Journal of Applied Psychology, 91*, 185-192.

Porter, S. R., Whitcomb, M. E. and Weitzer, W. H. (2004). Multiple surveys of students and survey fatigue. *New Directions for Institutional Research, 2004*(121), 63-73.

Potgieter, I. (2012). The relationship between the self-esteem and employability attributes of postgraduate business management students. *SA Journal of Human Resource Management*, *10*(2), 1-15.

Powell, C. (2003). The Delphi technique: Myths and realities. *Journal of Advanced Nursing*, *41*(4), 376-382.

Powell, T. C. (2001). Competitive advantage: Logical and philosophical considerations. *Strategic Management Journal*, *22*(9), 875-888.

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review, 68*(May–June), 79-91.

Prescott, E. C., & Visscher, M. (1980). Organization capital. *The Journal of Political Economy, 88*, 446-461.

Prikshat, V., Kumar, S., & Nankervis, A. (2019). Work-readiness integrated competence model: Conceptualisation and scale development. *Education + Training*. February, *15*, 1-27.

Prinz, C., Morlock, F., Freith, S., Kreggenfeld, N., Kreimeier, D., & Kuhlenkötter, B. (2016). Learning factory modules for smart factories in industrie 4.0. *Procedia CiRp, 54*, 113-118.

Quinlan, E., & Quinlan, A. (2010). Representations of rape: Transcending methodological divides. *Journal of Mixed Methods Research*, *4*(2), 127-143.

Rambaldi, G., Kyem, P. A. K., McCall, M., & Weiner, D. (2006). Participatory spatial information management and communication in developing countries. *The Electronic Journal of Information Systems in Developing Countries*, *25*(1), 1-9.

Ramdass, D., & Zimmerman, B. J. (2011). Developing self-regulation skills: The important role of homework. *Journal of Advanced Academics, 22*, 194-218.

Rasul, M. S., Rauf, R. A.A., & Mansor, A. N. (2013). Employability skills indicator as perceived by manufacturing employers. *Asian Social Science, 9*(8), 42.

Reio, T. G. Jr & Wiswell, A. (2000). Field investigation of the relationship among adult curiosity, workplace learning, and job performance. *Human Resource Development Quarterly*, *11*(1), 5-30.

Resick, C. J., Hargis, M. B., Shao, P., & Dust, S. B. (2013). Ethical leadership, moral equity judgments, and discretionary workplace behavior. *Human Relations, 66*(7), 951-972.

Ritter, B. A., Small, E. E., Mortimer, J. W., & Doll, J. L. (2018). Designing management curriculum for workplace readiness: Developing students' soft skills. *Journal of Management Education, 42*(1), 80-103.

Roberts, B. W., & Mroczek, D. (2008). Personality trait change in adulthood. *Current Directions in Psychological Science*, *17*(1), 31-35.

Robinson, J. P. (2000). What are employability skills? *The Workplace, 1*(3), 1-3.

Robles, M. M. (2012). Executive perceptions of the top 10 soft skills needed in today's workplace. *Business Communication Quarterly, 75*(4), 453-465.

Rogelberg, S. G., Conway, J. M., Sederburg, M. E., Spitzmüller, C., Aziz, S., & Knight, W. E. (2003). Profiling active and passive nonrespondents to an organizational survey. *Journal of Applied Psychology*, *88*(6), 1104.

Romero, D., Stahre, J., Wuest, T., Noran, O., Bernus, P., Fast-Berglund, Å., & Gorecky, D. (2016). *Towards an operator 4.0 typology: A human-centric perspective on the fourth industrial revolution technologies.* Paper presented at International Conference on Computers and Industrial Engineering (CIE46). October.

Rose, N. (1996). *Inventing ourselves: Psychology, power, and personhood*. Cambridge: Cambridge University Press.

Rosenberg, M. (1981). The self-concept: Social product and social force. In M. Rosenberg & R.H. Turner, *Social Psychology: Sociological Perspectives (*pp. 593-624). New York: Routledge.

Rosenthal, R., & Rosnow, R. L. (1991). *Essentials of behavioral research: Methods and data analysis (Vol. 2)*. New York: McGraw-Hill.

Rosin, J. (2015). The necessity of counselor individuation for fostering reflective practice. *Journal of Counselling & Development, 93*, 88-95.

Rothwell, A., & Rothwell, F. (2017). Graduate employability: A critical oversight. In M. Tomlinson, Michael & L.Holmes (Eds.), *Graduate Employability in Context* (pp. 41-63), London: Palgrave Macmillan.

Royston, P. (1992). Approximating the Shapiro-Wilk W-Test for non-normality. *Statistics and computing*, *2*(3), 117-119.

Ryan, K. (1986). The new moral education. *The Phi Delta Kappan*, *68*(3), 228-233.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68-78.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York: Guilford Publications.

Sadler-Smith, E. (2010). *The intuitive mind: Profiting from the power of your sixth sense*. John Wiley & Sons.

Saunders, M. N. K., Lewis, P., Thornhill, A., & Bristow, A. (2015). Understanding research philosophy and approaches to theory development. In M. N. K. Saunders, P. Lewis, & A. Thornhill (Eds.), *Research methods for business students* (pp. 122-161). Harlow: Pearson Education.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (*6th edition*). Harlow, Essex, UK: Pearson Education Limited.

Scarborough, H. (1998) Path(ological) dependency? Core competencies from an organisational perspective. *British Journal of Management, 9*, 219-232.

Scarborough, N. M., & Cornwall, J. R. (2011). *Essentials of entrepreneurship and small business management*. London: Pearson.

Schlegel, K., Grandjean, D., & Scherer, K. R. (2013). Constructs of social and emotional effectiveness: Different labels, same content? *Journal of Research in Personality, 47*(4), 249-253.

Schmidt, R. C. (1997). Managing Delphi surveys using nonparametric statistical techniques. *Decision Sciences, 28*(3), 763-774.

Schneider, K. (2009). Capability Approach & Coping Competencies–Coping with discontinuous employment biographies. In Schneider, K and Otto, H. (Eds). *From employability towards capability* (pp. 117- 126), Luxembourg: Inter-Actions.

Schreuder, A. M. G., & Coetzee, M. (2011). *Careers: An organisational perspective* (*4th edition*). Claremont: Juta and Company Ltd.

Schultz, T. W. (1961). *Investment in human capital*. Chicago, IL: University of Chicago Press.

Schwab, K. (2016). *The fourth industrial revolution: What it means, how to respond*. World Economic Forum, Davos, January, 14.

Schwab, K. (2017). *The Fourth Industrial Revolution*. New York: Crown Business.

Seale, C. (1999). Quality in qualitative research. *Qualitative inquiry, 5*(4), 465-478.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. New York: John Wiley & Sons.

Semadar, A., Robins, G., & Ferris, G. R. (2006). Comparing the validity of multiple social effectiveness constructs in the prediction of managerial job performance. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *27*(4), 443-461.

SEMCOG/MAC. (2012). *Talent Task Force's Lifelong Soft Skills Framework*. Retrieved from www.semcog.org/.../SEMCOG.../GetFile.ashx?...LifelongSoftSkillsFrameworkApril2012. Retrieval date: 18 June 2017.

Sen, A. (2009). *The idea of justice*. Cambridge, MA: Harvard University Press.

Sen, A., & Nussbaum, M. (Eds.). (1993). *Capability and well-being. The quality of life*. Oxford, Clarendon.

Senior, C., Reddy, P., & Senior, R. (2014). The relationship between student employability and student engagement: working toward a more unified theory. *Frontiers in Psychology, 5*, 238.

Serrat, O. (2017). *Knowledge solutions*. Singapore: Springer.

Seto, S., & Sarros, J. C. (2016). Servant leadership influence on trust and quality relationship in organizational settings. *International Leadership Journal*, *8*(3), 23-100.

Seval, H., & Caner, H. (2015). The impact of human resource management functions on corporate image. In Ş. Ş. Erçetin & S. Banerjee (Eds.), *Chaos, complexity and leadership 2013* (pp. 435-457). Springer: Cham.

Shafie, L., & Nayan, S. (2010). Employability awareness among Malaysian undergraduates. *International Journal of Business & Management, 5*(8), 119-123.

Shariff, N. (2015). Utilizing the Delphi survey approach: A review. *Journal of Nursing Care*, *4*(3),246.

Shiel, C., Williams, A., & Mann, S. (2005). Global perspectives and sustainable development in the curriculum: Enhanced employability, more thoughtful society. In *Enhancing graduate employability, the Roles of learning, Teaching, Research and Knowledge Transfer.* Proceedings of the Bournemouth University Learning and Teaching Conference (pp. 63-77).

Shivoro, R. S., Shalyefu, R. K., & Kadhila, N. (2018). Perspectives on graduate employability attributes for management sciences graduates. *South African Journal of Higher Education*, *32*(1), 216-232.

Sin, C., & Neave, G. (2016). Employability deconstructed: Perceptions of Bologna stakeholders. *Studies in Higher Education*, *41*(8), 1447-1462.

Sinclair, M. (2007). A guide to understanding theoretical and conceptual frameworks. *Evidence-Based Midwifery*, *5*(2), 39-40.

Singh, S. K., Burgess, T. F., Heap, J., Almatrooshi, B., & Farouk, S. (2016). Determinants of organizational performance: a proposed framework. *International Journal of Productivity and Performance Management*, *65*(6), 844-859.

Sipe, J. W., & Frick, D. M. (2015). *Seven pillars of servant leadership: Practicing the wisdom of leading by serving*. New York: Paulist Press.

Skobelev, P. O., & Borovik, S. Y. (2017). On the way from Industry 4.0 to Industry 5.0: from digital manufacturing to digital society. *Industry 4.0, 2*(6), 307-311.

Smallbone, T., & Quinton, S. (2004). Increasing business students' confidence in questioning the validity and reliability of their research. *Electronic Journal of Business Research Methods*, *2*(2), 153-162.

Smith, C. D. (2012). Evaluating the quality of work-integrated learning curricula: A comprehensive framework. *Higher Education Research and Development, 31*(2), 247-262.

Smith, C. D., & Worsfold, K. (2013). WIL curriculum design and student learning: a structural model of their effects on student satisfaction. *Studies in Higher Education, 39*(6*)*, 1070-1084.

Smith, C., Ferns, S., & Russell, L. (2014). *Conceptualising and measuring 'employability' –lessons from a National OLT Project.* Retrieved from http://acen.edu.au/2014-conference-proceedings (139-148). Retrieval date: 18 July 2018.

Smith, C., Ferns, S., & Russell, L. (2016). Designing placements that improve student employability. *Asia-Pacific Journal of Cooperative Education, 17*(2), 197-211.

Smith, J. G., DuBois, B., & Krasny, M. E. (2016). Framing for resilience through social learning: Impacts of environmental stewardship on youth in post-disturbance communities. *Sustainability Science, 11*(3), 441-453.

Smith, J., Bekker, H., & Cheater, F. (2011). Theoretical versus pragmatic design in qualitative research. *Nurse Researcher, 18*(2), 39-51.

Smith, J., Meijer, G., & Kielly-Coleman, N. (2010). Assurance of learning: The role of work integrated learning and industry partners. In M. Campbell (Ed.), *Work integrated learning: Responding to challenges* (pp. 409–419). Perth, WA: Australian Collaborative Education Network (ACEN), Curtin University of Technology.

Smith, V. (2010). Review article: Enhancing employability: Human, cultural, and social capital in an era of turbulent unpredictability. *Human Relations, 63*(2), 279–300.

Soni, G., & Kodali, R. (2013). A critical review of supply chain management frameworks: Proposed framework. *Benchmarking: An International Journal, 20*(2), 263-298.

Sosdian, C. P., & Sharp, L. M. (1980). Nonresponse in mail surveys: Access failure or respondent resistance. *The Public Opinion Quarterly*, *44*(3), 396-402.

Soto, C. J. (2018). Big Five personality traits. In M. H. Bornstein, M. E. Arterberry, K. L. Fingerman, & J. E. Lansford (Eds.), *The SAGE encyclopedia of lifespan human development* (pp. 240-241). Thousand Oaks, CA: Sage.

Spencer, L. M. Jr., & Spencer, S. M. (2008). *Competence at work: Models for superior performance*. New York: John Wiley & Sons.

Spencer, L., & Spencer, S. (1993). *Competence at work: A model for superior performance*. New York: Wiley.

Sprinthall, R. C., & Fisk, S. T. (1990). *Basic statistical analysis*. Englewood Cliffs, NJ: Prentice Hall.

Stats SA. Statistics South Africa. (2019). *Quarterly Labour Force Survey, Quarter 1: 2019. Statistical release,* P0211. Retrieved from http://www.statssa.gov.za/publications/P0211/P02111stQuarter2019.pdf. Retrieval date: 27 October 2019.

Stearns, P. N. (2018). *The industrial revolution in world history*. New York: Routledge.

Steeves, R. (2010). *Breaking the leadership mold: An executive's guide to achieving organisational excellence.* Ontario, Canada: John Wiley & Sons.

Sternberg, R. (2018). Speculations on the role of successful intelligence in solving contemporary world problems. *Journal of Intelligence*, *6*(1), 4-14.

Stevens, M., & Norman, R. (2016). Industry expectations of soft skills in IT graduates: A regional survey. In *Proceedings of the Australasian Computer Science Week Multiconference* (13). ACM. February.

Strydom, H. (2005). Ethical aspects of research in the social sciences and human service professions. In A. S. de Vos, H. Strydom, C. B. Fouché, & C. S. L. Delport. *Research at grass roots for the social sciences and human service professions* (*3rd edition*. pp. 62-74). Pretoria: Van Schaik.

Stuetzer, M., Obschonka, M., Davidsson, P., & Schmitt-Rodermund, E. (2013). Where do entrepreneurial skills come from? *Applied Economics Letters, 20*(12), 1183-1186.

Sultana, R. G. (2009). Competency and competency frameworks in career guidance: complex and contested concepts. *International Journal of Education and Vocational Guidance, 9*, 15-30.

Tam, S., & Gray, D. E. (2016). What can we learn from the organizational life cycle theory? A conceptualization for the practice of workplace learning. *Journal of Management Research, 8*(2):18-30.

Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioural research.* Thousand Oaks: Sage.

Tashakkori, A., & Teddlie, C. (2010). Putting the human back in “Human research methodology”: The researcher in mixed methods research. *Journal of Mixed Methods Research, 4*(4), 271-277.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509-533.

Teijeiro, M., Rungo, P., & Freire, M. J. (2013). Graduate competencies and employability: The impact of matching firms’ needs and personal attainments. *Economics of Education Review, 34*, 286-295.

Teng, L. S., & Zhang, L. J. (2016). A questionnaire-based validation of multidimensional models of self-regulated learning strategies. *The Modern Language Journal*, *100*(3), 674-701.

Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behaviour: self-identity, social identity and group norms. *British Journal of Social Psychology, 38*(3), .225-244.

Thayaparan, M., Siriwardena, M., Malalgoda, C. I., Amaratunga, D., Lill, I., & Kaklauskas, A. (2015). Enhancing post-disaster reconstruction capacity through lifelong learning in higher education. *Disaster Prevention and Management, 24*(3), 338-354.

Thompson, B. (1997). The importance of structure coefficients in structural equation modeling confirmatory factor analysis. *Educational and Psychological Measurement, 57*, 5-19.

Thonglek, S. (2015). Maximising stakeholders benefits of work integrated learning programs: Schools of chemical engineering (Doctoral thesis). University of Queensland, Australia.

Thorndike, E. L. (1920). Intelligence and its uses. *Harper's Magazine, 140*, 227-235.

Tomer, J. F. (1998). Organizational capital and joining-up: Linking the individual to the organization and to society. *Human Relations*, *51*(6), 825-846.

Tomlinson, M. (2012). Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy, 25*(4), 407-431.

Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability. *Education + Training*, *59*(4), 338-352.

Tomlinson, M. (2018). Competences, capabilities and capitals: Conceptual paradigms in the education-employment relationship. In A. Mann, P. Huddleston & E. Kashefpakdel (Eds.), *Essays on Employer Engagement in Education* (pp. 71-85). New York: Routledge.

Tony, J. (2017). *8 Benefits of investing in your human capital development.* Retrieved from https://theolsongroup.com/5-benefits-investing-human-capital/. Retrieval date: 7 March 2019.

Tran, T. T. (2015). Is graduate employability the 'whole-of-higher-education-issue'? *Journal of Education and Work*, *28*(3), 207-227.

Tuli, F. (2010). The basis of distinction between qualitative and quantitative research in social science. *Ethiopian Journal of Education and Sciences, 6*, 97-108.

Turner, S. F., Cardinal, L. B., & Burton, R. M. (2017). Research design for mixed methods: A triangulation-based framework and roadmap. *Organizational Research Methods*, *20*(2), 243-267.

UKCES. (2009). *The employability challenge: Full report.* UK Commission for Employment and Skills. Retrieved from https://webarchive.nationalarchives.gov.uk/+/http:/www.ukces.org.uk/upload/pdf/EmployabilityChallengeFullReport.pdf. Retrieval date: 08 March 2017.

UKCES. (2014). *UK Commission's Employer Skills Survey 2013: UK Results, January 2014.* Retrieved from https://www.gov.uk/.../evidence-report-81-ukces-employer-skills-survey-13-full-report. Retrieval date: 16 April 2017.

Ullah, A.A., Mohamad, S.M., Hassan, N.H. & Chattoraj, D. (2019). Global skills deficiency: perspectives of skill mobility in Southeast Asian countries. *Asian Education and Development Studies*, *8* (4), 416-432.

Umbach, P. D. (2005). Getting back to the basics of survey research. *New directions for Institutional Research*, *2005*(127), 91-100.

Utami, A. F., Bangun, Y. R., & Lantu, D. C. (2014). Understanding the role of emotional intelligence and trust to the relationship between organizational politics and organizational commitment. 5th Indonesia International Conference on Innovation, *Entrepreneurship, and Small Business (IICIES 2013), 115*, 378-386. doi:10.1016/j.sbspro.2014.02.444.

Uys, L. R. (2008). Should researchers protect the good name and reputation of institutions in which research is done? *South African Journal of Higher Education*, *22*(2), 457-465.

Van Dalen, H. P., Henkens, K., & Schippers, J. (2009), Dealing with older workers in Europe: A comparative survey of employers' attitudes and actions. *Journal of European Social Policy, 19*(1), 48-60.

Van der Heijde, C .M. (2014) Employability and self-regulation in contemporary careers. In M. Coetzee (Ed.), *Psycho-social career meta-capacities: Dynamics of contemporary career development* (pp. 7-17). Dordrecht: Springer International Publishing.

Van der Heijde, C. M., & Van der Heijden, B. I. J. M. (2006). A competence-based and multi-dimensional operationalization and measurement of employability. *Human Resource Management, 45*, 449-476.

Van der Klink, J. J., Bültmann, U., Burdorf, A., Schaufeli, W. B., Zijlstra, F. R., Abma, Van der Wilt, G. J. (2016). Sustainable employability – definition, conceptualization, and implications: A perspective based on the capability approach. *Scandinavian Journal of Work, Environment & Health, 42*(1), 71-79.

Van der Klink, M. V. D., & Boon, J. (2002). The investigation of competencies within professional domains. *Human Resource Development International, 5*(4), 411-424.

Van Dierendonck, D. (2011). Servant leadership: A review and synthesis. *Journal of Management*, *37*(4), 1228-1261.

Van Dyne, L., Ang, S., Ng, K. Y., Rockstuhl, T., Tan, M. L., & Koh, C. (2012). Sub-dimensions of the four-factor model of cultural intelligence: Expanding the conceptualization and measurement of cultural intelligence. *Social and Personality Psychology Compass, 6*(4), 295-313.

Van Harten, J., De Cuyper, N., Guest, D., Fugate, M., Knies, E., & Forrier, A. (2017). HRM and employability: an international perspective. Special issue of *The International Journal of Human Resource Management, 28*(19), 2831-2835.

Van Hercke, D., De Cuyper, N., & Peeters, E. (2014) Defining perceived employability. A psychological approach. *Personnel Review, 43*(4), 592-605.

Vathanophas, V., & Thai-Ngam, Y. (2007). Competency requirements for effective job performance in the Thai public sector. *Contemporary Management Research*, *3*(1), 45-70.

Vaughan, K. (2017). The role of apprenticeship in the cultivation of soft skills and dispositions. *Journal of Vocational Education & Training*, *69*(4), 540-557.

Vernon, W. (2009). A Delphi technique: A review. *International Journal of Therapy and Rehabilitation, 16*(2), 69-76.

Vielmetter, G., & Sell, Y. (2014). Leadership 2030: The six megatrends you need to understand to lead your company into the future. New York: AMACOM/American Management Association.

Vinodkumar, M. N., & Bhasi, M. (2010). Safety management practices and safety behaviour: Assessing the mediating role of safety knowledge and motivation. *Accident Analysis & Prevention, 42*(6), 2082-2093.

Visser, P. S., Krosnick, J. A., Marquette, J., & Curtin, M. (1996). Mail surveys for election forecasting? An evaluation of the Colombia Dispatch Poll. *Public Opinion Quarterly, 60*,181-227.

Walker, B. H., & D. Salt. (2012). *Resilience practice: Building capacity to absorb disturbance and maintain function*. Washington, D.C., USA: Island Press.

Walker, M., Hills, S., & Heere, B. (2017). Evaluating a socially responsible employment program: Beneficiary impacts and stakeholder perceptions. *Journal of Business Ethics, 143*(1), 53-70.

Walsh, B. M., Lee, J. J., Jensen, J. M., McGonagle, A. K., & Samnani, A. K. (2018). Positive leader behaviors and workplace incivility: The mediating role of perceived norms for respect. *Journal of Business and Psychology*, *33*(4), 495-508.

Walumbwa, F. O., Hartnell, C. A., & Misati, E. (2017). Does ethical leadership enhance group learning behavior? Examining the mediating influence of group ethical conduct, justice climate, and peer justice. *Journal of Business Research*, *72*, 14-23.

Wang, H. (2016). An introduction on the role of organization capital for the enterprise's endogenous growth. *Journal of Service Science and Management, 9*(03), 233.

Watson, R., 2015. Quantitative research. *Nursing Standard (2014+)*, *29*(31), 44.

Waugh, W. L. Jr, & Streib, G. (2006). Collaboration and leadership for effective emergency management. *Public Administration Review, 66*(1), 131-140.

WEF. World Economic Forum. (2017). Realizing human potential in the Fourth Industrial Revolution – An agenda for leaders to shape the future of education, gender and work. Paper presented at World Economic Forum, Geneva, 2017. Retrieved from http://www3.weforum.org/docs/WEF_EGW_Whitepaper.pdf. Retrieval date: 4 June 2018.

Welch, J. F., & Welch, S. (2010). *Winning: The ultimate business how-to book*. London, U.K.: HarperCollins.

Werner, B. T., & Mcnamara, D. E. (2007). Dynamics of coupled human-landscape systems. *Geomorphology*, *91*(3-4), 393-407.

Whelan, N., McGilloway, S., Murphy, M. P., & McGuinness, C. (2018). EEPIC – Enhancing employability through positive interventions for improving career potential: The impact of a high support career guidance intervention on the wellbeing, hopefulness, self-efficacy, and employability of the long-term unemployed-a study protocol for a randomised controlled trial. *Trials*, *19*(1), 141.

Whiston, S. C., & Oliver, L. W. (2005). Career counseling process and outcome. In W. B. Walsh, M. L. Savickas & P. Hartung, *Handbook of Vocational Psychology* (pp.167-206). New York: Routledge.

White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66*, 297-333.

Wilcox, T. (2006). Human resource development as an element of corporate social responsibility. *Asia Pacific Journal of Human Resources*, *44*(2), 184-196.

Williams, A. C. (2015). *Soft skills perceived by students and employers as relevant employability skills.* Walden University. Walden Dissertations and Doctoral Studies. Retrieved from http://scholarworks.waldenu.edu/dissertations. Retrieval date: 18 June 2017.

Williams, S., Dodd, L.J., Steele, C., & Randall, R. (2016). A systematic review of current understandings of employability. *Journal of Education and Work, 29*(8), 877-901.

Wilson, T. T., & Marnewick, A. L. (2018). *A comparative study of soft skills amongst the Washington accord engineering degree graduates with industry expectations.* In 2018 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC) June. (1-6). IEEE.

Wilton, N. (2011). Do employability skills really matter in the graduate labour market? The case of business and management graduates. *Work, Employment and Society, 25* (1), 85-100.

Wilton, N. (2014). Employability is in the eye of the beholder: Employer decision-making in the recruitment of work placement students. *Higher Education, Skills and Work-based Learning, 4*(3), 242-255.

Witt, L. A., & Ferris, G. R. (2003). Social skill as moderator of the conscientiousness-performance relationship: Convergent results across four studies. *Journal of Applied Psychology, 88*(5), 809.

Woodruffe, C. (1991). Competent by any other name. *Personnel Management*, *23*(9), 30-33.

Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counselling Psychologist*, *34*(6), 806-838.

Xu, M., David, J. M., & Kim, S. H. (2018). The fourth industrial revolution: Opportunities and challenges. *International Journal of Financial Research, 9*(2), 90-95.

Yang, Y., & Green, S. B. (2011). Coefficient alpha: A reliability coefficient for the 21st century? *Journal of Psychoeducational Assessment, 29*(4), 377-392.

Ybarra, O., Kross, E., & Sanchez-Burks, J. (2014). The “big idea” that is yet to be: Toward a more motivated, contextual, and dynamic model of emotional intelligence. *Academy of Management Perspectives*, *28*(2), 93-107.

Youssef-Morgan, C. M., & Luthans, F. (2015). Psychological capital: An evidence-based positive approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 339-366.

Yusof, S. M., & Aspinwall, E. (2000). Critical success factors for total quality management implementation in small and medium enterprises. *Total Quality Management, 10*(4-5), 803-809.

Zafar, M. J., Yasin, G., & Ijaz, M. (2012). Social networking as a source for developing entrepreneurial intentions among entrepreneurs; A case of Multan. *Asian Economic and Financial Review, 2*(8), 1072-1084.

Zandvoort, H. (2008). Preparing engineers for social responsibility. *European Journal of Engineering Education, 33*(2), 133-140.

Zangiski, M. A. D. S. G., De Lima, E. P., & Da Costa, S .E. G. (2013). Organizational competence building and development: Contributions to operations management. *International Journal of Production Economics, 144*(1), 76-89.

Zehir, C., Acar, A. Z., & Tanriverdi, H. (2006). Identifying organizational capabilities as predictors of growth and business performance. *The Business Review, 5*(2), 109-116.

Ziglio, E. (1996). The Delphi method and its contribution to decision-making. in M. Alder & E. Ziglio (Eds.), *Gazing into the Oracle: The Delphi method and its application to social policy and public health* (pp. 3-33). London: Jessica Kingsley Publishers.

Zimmerman, E. B., Woolf, S. H., & Haley, A. (2015). Understanding the relationship between education and health: a review of the evidence and an examination of community perspectives. Population health: behavioral and social science insights. *Rockville: Agency for Healthcare Research and Quality*, *3*, 47-84.

APPENDIX A

A MIXED METHOD QUESTIONNAIRE TO DETERMINE THE SOFT SKILLS BEHAVIOURAL COMPETENCIES NEEDED BY INTERNS TO BE DEEMED EMPLOYABLE BY ESKOM

The questionnaire consists of five sections.

1. Consent to Participate

1.1 I confirm that the person asking my consent to take part in this research has informed me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

☐ Yes ☐ No

1.2 I have read and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study.

☐ Yes ☐ No

1.3 I understand that my participation is voluntary and that I am free to withdraw at any time without penalty.

☐ Yes ☐ No

1.4 I am aware that the findings of this study will be **anonymously** processed and reported in a research report, journal publications and/or conference proceedings.

☐ Yes ☐ No

1.5 I further confirm that:
- I have read and understood the information provided on the email invitation.
- I am giving my consent to participate in the study on a voluntary basis.
- I fully understand the purpose of the study.

I .....to participate in this academic research study (please select one of the following options)

☐ Agree ☐ Do not agree (Please do not continue if option is selected)

Demographic: General Information

2.

2.1 I am participating in the position of:

☐ Intern/Young Professional Supervisor ☐ Middle Manager

2.2	My age:	☐ 18 - 21 ☐ 31 – 40	☐ 22 - 25 ☐ 41 – 50	☐ 26 - 30 ☐ 51 +
2.3	Gender	☐ Male	☐ Female	
2.4	Racial Grouping	☐ Black ☐ Asian	☐ Coloured ☐ Indians	☐ White ☐ Other
2.5	Qualification	☐ Certificate ☐ Degree	☐ Diploma ☐ Post-graduate	☐ Higher Diploma ☐ Other

3. General Information

3.1 Province based in:

- ☐ Eastern Cape
- ☐ KwaZulu Natal
- ☐ North West
- ☐ Free State
- ☐ Limpopo
- ☐ Northern Cape
- ☐ Gauteng
- ☐ Mpumalanga
- ☐ Western Cape

3.2 Business unit:

- ☐ Corporate
- ☐ Generation
- ☐ Distribution
- ☐ Transmission
- ☐ Eskom Enterprises

3.3 Departmental output:

- ☐ Chemistry
- ☐ Design
- ☐ Finance
- ☐ Maintenance
- ☐ Procurement
- ☐ Quantity Surveying
- ☐ Sustainability
- ☐ Other
- ☐ Civil works
- ☐ Electrical/Electronics
- ☐ Human Resource
- ☐ Operations
- ☐ Project Management
- ☐ Security
- ☐ Technology Solutions
- ☐ Customer Services
- ☐ Environmental Compliance
- ☐ IT
- ☐ OHSA Compliance
- ☐ Quality Assurance
- ☐ Stores management
- ☐ Transport

Section 4: Employability Skills Behavioural Competencies

The following 255 skills are preselected for you to identify whether interns should have these skills to enhance their employability At the end of the questionnaire provision is made for you to add any skill you might deemed important but not stated already.

Kindly indicate whether the following stated skills are: (Select only one response per stated skill)

Not Applicable	Not important	Unsure	Important	Very Important	Critical

	Skill	Not Applicable	Not important	Unsure	Important	Very Important	Critical
1	Demonstrate a positive attitude						
2	Ability to control own emotions and behaviour, particularly in difficult situations or under stress						
3	Raises compliance, ethical or other issues to protect the Reputation and obligations of the organisation.						
4	Have a self-starting attitude in pursuit of goals						
5	Defines ambitious, but realistic, personal goals.						
6	Expresses own opinion while remaining factual and respectful.						
7	Personal energy						
8	Negotiating responsively						

9	Plan and manage time						
10	Ability to read body language and emotions of others and direct own behaviour appropriately						
11	Accept the consequences of own behaviour and actions						
12	The ability to see the bigger picture.						
13	Adapt to requirements that are changing						
14	Understands others' complex or underlying needs, motivation, emotions or concerns and adjusts communication effectively						
15	Formal education (after school qualification)						
16	Adapts arguments to others' needs/interests.						
17	Willingness to take on more responsibility						
18	Maintains continuous, open and consistent communication with others.						
19	Ability to separate emotions from situations						
20	Resilience to negative feedback.						
21	The ability to balance and defuse inner tensions and stressors						
22	Competent use of Micro Soft Power Point software						
23	Provides constructive feedback to others.						
24	Consult with others when uncertain						
25	Consider cost savings.						
26	Weighing up risk, evaluate alternatives and apply evaluation						
27	Set goals and priorities that will balance work and personal life						
28	The ability to identify the resources needed to accomplish a given task.						
29	Take care of your personal safety						
30	Being courteous and respectful						
31	To seek better ways to do things						
32	Punctual work attendance						
33	Direct energy towards the completion of a goal						
34	Developing creative, innovative solutions						
35	Managing own learning						
36	Creative Thinking						
37	Encourages people with opposing viewpoints to express their concerns.						

38	Meet deadlines						
39	Adapts to new ideas and initiatives relevant to own area of work.						
40	Accept responsibility for own decisions and actions						
41	Assess, weigh and manage risk						
42	Responds to and anticipates client needs in a timely, professional, helpful and courteous manner						
43	Can manage continuous change						
44	Set realistic goals						
45	Translating ideas into action						
46	Keep up to date on technical knowledge and new developments.						
47	Can initiate changes to work or life						
48	Share learnings with peers						
49	A positive orientation toward own worth or value						
50	How to be practical/hands-on						
51	Honesty in actions						
52	Think logical manner when approaching problems or situations						
53	Seek more information to understand a problem						
54	Should have some work experience						
55	Avoid jumping to premature conclusions						
56	Reflecting on and learning from own actions.						
57	Being willing to learn new skills						
58	Realistic in expectations of others						
59	Perceive and understand the feelings and attitudes of others (Step in other's shoes)						
60	Challenge existing practices in order to become more effective.						
61	Identify the root cause behind a problem						
62	Cooperative and supportive when working in a team						
63	Be confident						
64	Deal constructively with organizational or team politics						
65	Contributes to improve work methods, outcomes and team performance.						
66	Considers people’s concerns and adjusts own behaviour in a helpful manner.						

67	To confront difficult issues in an objective and non-emotional manner						
68	Anticipating problems before they happen.						
69	Use appropriate vocabulary and grammar when communicating with others						
70	Competent use of Micro Soft Excel software						
71	Team facilitation skills						
72	Considers people's concerns and adjusts own behaviour in a helpful manner.						
73	Focus on problem solutions						
74	To understand a given situation and to act appropriately						
75	Drive safety consciousness in workplace.						
76	Understands the reason behind, or motivation for someone's actions.						
77	Organise and motivate people to get things done.						
78	Gain support from others for recommendations and ideas						
79	A caring attitude						
80	Monitor own performance to reach deadlines and milestones						
81	Strives to consistently meet service standards.						
82	Can motivate others toward action.						
83	Make rational judgment from analysing information and data						
84	Take the credit or blame for the results of own work						
85	Ability to support the weak team members						
86	Takes new initiatives aimed at improving team performance.						
87	Follow up on goals, tasks and assignments to assure successful completion						
88	Understand the role of conflict in a group in reaching solutions						
89	Takes advantage of learning opportunities provided						
90	Respect for others						
91	Working across different ages irrespective of gender, race, religion or political						
92	Use technology effectively to communicate with others						
93	Stays open-minded and encourages others to bring new perspectives.						

94	The ability to see different types of solutions for a given problem						
95	Seek ways to improve own knowledge and skills						
96	Confident to work with numerical data						
97	Invites and builds upon the ideas of others.						
98	Take care of own health						
99	Presents factual material in a concise manner.						
100	Being assertive						
101	Understands the reason behind, or motivation for own actions.						
102	Consider a wide range of alternatives prior to making a decision						
103	Competent use of Micro Soft Word software						
104	Find the true cause of problems before acting						
105	Willingness to work overtime when needed						
106	Ability to confidently express views or needs without either aggression/ dominance / undue submissiveness towards others						
107	Listens to differing points of view and promotes mutual understanding						
108	Think logical						
109	Structure information in a way that meets the needs of the audience						
110	To hear, understand and follow directions.						
111	Break down processes into its component activities						
112	Team negotiation skills						
113	Keeps clients up to date on the progress of the service they are receiving and changes that affect them.						
114	Personal commitment to execute a given task						
115	Manage other's emotions						
116	Tackle demanding goals with enthusiasm						
117	In a positive manner handle rejection on a personal level						
118	Develop a plan, revise, adjust, implement						
119	Having a range of basic IT skills						
120	Awareness of how the external environment influence the organisation						
121	Dependable						

122	Resolves conflict among team members sensitively and fairly.						
123	Identify where improvement could occur						
124	Learn from peers						
125	The ability to respond and integrate change with minimal resistance						
126	Competent use of Outlook software						
127	Manages the work plan, sets timelines and milestones, and involves stakeholders to deliver on time.						
128	Make a favourable first impression						
129	Can break information into component parts to see relationships and patterns						
130	Driver's license						
131	Reporting dishonesty of others						
132	Resolving customer concerns to customer satisfaction						
133	Knows and respects the Organisation’s Code of Conduct and values.						
134	Common Sense						
135	Work on own.						
136	Belief in own ability to succeed in a particular situation						
137	Pay attention to detail						
138	Uses mathematical skills and strategies						
139	Communicate effectively with people from different cultures, backgrounds, and authority levels						
140	Work independently or as a team player						
141	Telephone etiquette						
142	Holistic consideration of solutions to problem						
143	Prioritises clients’ issues and address them accordingly.						
144	Uses compelling argumentation to convey conclusions and ideas.						
145	Accept feedback and take responsibility						
146	Drug free						
147	Can present ideas and opinions clearly						
148	The ability to evaluate future implications of current decisions and actions.						
149	Ability to interact appropriately with other people, without undue conflict or discomfort						

150	See the details, compare with a standard and identify flaws.						
151	Accept and provide feedback in a constructive and considerate manner						
152	Manage own emotions						
153	Over-use of cell phone or telephone						
154	Understanding the needs of internal and external customers						
155	Having enthusiasm for ongoing learning						
156	The ability to be objective in evaluating different situations						
157	Being willing to learn in any setting – on and off the job						
158	Promotes and encourages others to keep up to date with the Organisation's rules, structures, decision-making bodies,						
159	Distinguishes between critical and irrelevant pieces of information.						
160	Empathising						
161	Manage stressful situations						
162	Make decisions that takes into account all aspects and components						
163	Prioritise self-development to enhance competencies, knowledge and skills						
164	Share information willingly						
165	Avoid complicated language when presenting ideas or insights						
166	Comply with policies, directives and procedures						
167	Ability to identify problems and devise solutions						
168	Take care of others' safety						
169	Willingness to listen to what others are saying						
170	Recognize and respect people's diversity, individual differences and perspectives						
171	Taking initiative						
172	Is able to explain how own work relates to the goals of the Organisation.						
173	Anticipates clients' upcoming needs and concerns.						
174	Being resourceful						
175	Initiates collaboration with others and spontaneously assists others in the delivery of their work.						
176	Define objectives						

177	Gain respect from others.						
178	Being open to new ideas and techniques						
179	Be conscious of the feelings and opinions of others						
180	Personal integrity						
181	Drive action to achieve goals						
182	Understands and recognises the value of other points of view and ways of doing things.						
183	Be able to respond constructively to change						
184	Demonstrates understanding of the general environment in which the Organisation operates.						
185	Computer literacy						
186	Be accountable for own actions and the actions of group						
187	Understand the role of conflict in a group to reach solutions						
188	Multitasking						
189	Developing practical solutions						
190	Uses scientific skills and strategies						
191	The ability to listen to many points of view without bias.						
192	Uphold the ethics and values of the company and workplace.						
193	Ability to confront people problems to resolve conflicts in a constructive manner						
194	Maintains objectivity when one's own positions or opinions are challenged by peers or stakeholders.						
195	Awareness of how organisation works						
196	Practice responsible behaviour.						
197	Ability to act objectively						
198	Makes efforts to optimise process workflows efficiently.						
199	Show interest, motivation, and effort						
200	Understanding basic business systems and their relationships						
201	Applying problem solving strategies across a range of areas						
202	Makes a positive contribution in team						
203	Have realistic expectation from others that can be met.						
204	Meaningful contribution to problem-solving						

205	Recognize the good efforts of self and others						
206	Caring about company success						
207	Aware of impact of own actions						
208	Fosters trust in teams						
209	Speaking clearly and directly						
210	Be willing to continuously learn						
211	Writing skills						
212	Can give accurate explanations of information and data presented						
213	Collecting, analysing and organising information						
214	Develop plans for specific goals and tasks						
215	Understand the strategic goals of the Organisation.						
216	Checks own understanding of others' communication before responding						
217	Remains objective when facing criticism.						
218	The ability to form working relationships						
219	Not expecting to be promoted in a short time						
220	Adapting resource allocations to cope with contingencies and changes						
221	Assumes additional responsibilities to facilitate the achievement of team goals.						
222	Use of graphics and tables to effectively present numerical data.						
223	Solving problems in teams						
224	Establishing and using networks						
225	Considers problems from all new perspectives						
226	Be culture sensitive						
227	Work to quality standards						
228	Recalls others' main points and takes them into account in own communication.						
229	Show respect for the views and contributions of other team members						
230	Self-motivation to stay focused and committed to a task						
231	Expresses negative feelings constructively						
232	Capacity to deal with competing work demands/challenges						
233	Ability to lead others						

234	Consistently clean, tidy and appropriately dressed, with a polite and professional manner						
235	Work within group dynamics						
236	Come up with innovative ideas						
237	Follows-up with clients during and after the delivery of services to ensure that their needs have been met.						
238	Technology savvy						
239	The ability to motivate others						
240	Be socially responsible and contribute to community						
241	Deal with people, problems and situations with honesty, integrity and personal ethics						
242	Sound financial awareness						
243	Have a positive and open attitude toward others.						
244	Identifies gaps in information						
245	Successfully implement knowledge in daily activities						
246	The ability not to judge others.						
247	Operating, compute and using basic systems and applications as necessary.						
248	Learn from own and others' mistakes						
249	Consider various options and their consequences of solutions						
250	Manages assignments’ delivery process and deadlines.						
251	Encourages others to contribute by overcoming cultural barriers and background differences.						
252	Set priorities with a proper sense of urgency and importance						
253	Proposes ways to do things differently.						
254	Clearly shows clients that their perspectives are valued.						
255	Comply with all Environmental policies and legislation						

5. Open-Ended Question

5.1 Please state any skill/skills you think should also be included in the Eskom Skills List Next to the stated skill, please indicate if the skill is:

- **Important**
- **Very Important**
- **Critical**

APPENDIX B

CONSENT FORM FOR ESKOM SUBJECT EXPERT PANEL MEMBER

PRINCIPAL INVESTIGATOR/RESEARCHER:	Zelda Bisschoff	084 454 4000
STUDY LEADER:	Dr Liezel Massyn	051 401 7305

Dear Eskom Subject Expert,

The purpose of the study is to develop a Soft Skills Competency framework to enhance intern employability within Eskom.

Internal supervisors and Middle Managers (MPS) were requested to identify the employability competencies needed by interns to enhance their employability with Eskom and subsequent through put rate. The completed questionnaires were analysed and 255 skill behaviour competencies have been identified and rated by the respondents as important to Eskom. You are required to assist the researcher to confirm whether the identified employability competencies are relevant to the business and if, to what degree of importance.

Consent to participate:

I confirm that the person asking my consent to take part in this research has informed me about the nature, procedure, potential benefits and anticipated inconvenience of participation. You have the right to refuse to participate. I further confirm that:

I have read and understood the information provided on the email invitation.

I am giving my consent to participate in the study on a free and voluntary basis.

I fully understand the purpose of the study.

I am aware that the findings of this study will be anonymously processed into a research report, journal publications, and/or conference proceedings.

I, (please select one of the following options):

Agree ○ Disagree ○

to participate in this academic research study

Signature of participant Date

Signature of researcher Date

APPENDIX C

ESKOM SUBJECT EXPERTS CONSENSUS QUESTIONNAIRE

Thank you for taking part in this exercise. The exercise will stretch over a period of 3 weeks and require you to complete at most three rounds of questions. This first questionnaire should take at least 30 minutes to complete, and responses should be submitted by Friday…….”

The aim of the exercise is to confirm the employability competencies required by Eskom interns. In preparation and in support of this aim, we have requested a sample of Intern supervisors and Middle managers to identify the employability skills Eskom interns should display in order to enhance their employability in support of Eskom’s strategic objectives.

During this first round, you are requested to:

Evaluate the competencies by considering the 6-point Likert scale rating as well as the competency stated. Kindly indicate whether the competency a 'should not be included as a skill' or 'of little importance', ‘relatively important’, ‘very important,’ or’ critical’. Please feel free to elaborate on your choice in the comments column should you have the need to do so.

After assessing the stated competencies, please indicate any additional competencies you might deemed necessary.

Kindly state any competencies that you deemed to be included in the competency list. Please motivate.

……
……
……

The results will be collated and non-consensus items circulated with the second round of the exercise within 5 days after closure of the first round. The second round, would involve clarification questions in order to gain a broad understanding of your expert view and achieve as strong consensus as possible. If needed a third round would be followed.

Thank you for your valuable participation and input. Your continual support and participation would be greatly appreciated.

APPENDIX D

ACADEMIC EXPERT FRAMEWORK EVALUATION CONSENT FORM

DATE: September 2019

TITLE OF THE RESEARCH PROJECT: A soft skill competency framework for the Enhancement of Intern Employability within Eskom.

PRINCIPAL INVESTIGATOR/RESEARCHER:	Zelda Bisschoff	084 454 4000
STUDY LEADER:	Dr Liezel Massyn	051 401 7305

PURPOSE OF THE STUDY: The primary objective of this study is to develop a soft skill competency framework to enhance graduate intern employability within Eskom.

I confirm that the person asking my consent to take part in this research has informed me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read and understood the study as described in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study. I understand that my participation is voluntary and that I am free to withdraw at any time without penalty. I am aware that the findings of this study will be anonymously processed into a research report, journal publications, and/or conference proceedings.

I agree to partake in the Delta verification collection method.

I have received a signed copy of the informed consent agreement.

Signature of Participant: _____ Date: _____

Full Name(s) of Researcher(s): _____

Signature of Researcher: _____ Date: _____

APPENDIX E

ACADEMIC EXPERT EVALUATION CONSENSUS PROCESS

Thank you for taking part in this framework validation exercise. As an academic expert on the subject matter of Human Development and/or Business Management your input will be valuable as to determine whether the developed soft skill competency framework will be feasible to enhance intern employability and to identify shortcomings for improvement.

You are requested to give your personal view as to

Possible shortcoming of the framework.

The alignment of the various aspects.

The design and structure of the framework

The fit-for-purpose of the framework?

General Feedback

APPENDIX F

PERMISSION LETTER 1 FROM ESKOM

Eskom

Date:
30 March 2017
Enquiries:
Mr Len Turner
Telephone:
+27 11 800-5184

To: The Registrar
University of Free State

ETHICS CLEARANCE: CONFIRMATION OF ESKOM INTELLECTUAL PROPERTY RIGHTS AND SECURITY CLEARANCE FOR DOCTORAL RESEARCH – MRS ZELDA S BISSCHOFF

This memorandum serves as an ethics clearance; confirmation of Eskom intellectual property rights and security clearance for the continuation of Doctoral level research and write-up by Mrs Z S Bisschoff. The research topic is "**A Soft Skills Competency Framework for the Enhancement of Intern Employability within Eskom**"
Mrs Bisschoff has followed due internal processes in terms of gaining permission for this research.

It must be noted that this general clearance is for a limited period only, which will be for the financial year 2018 till end 2020, and in no way waives Eskom's Intellectual Property Rights.

Yours sincerely

Len Turner
Senior Consultant
Skills Development: CoE

APPENDIX G

PERMISSION LETTER 2 FROM ESKOM

Eskom

The Registrar
UNIVERSITY OF THE FREE STATE
205 Nelson Mandela Drive
Park West
BLOEMFONTEIN
9301

Date:
24 April 2018

Enquiries:
Tel :011 651 6446

To whom it may concern

ETHICAL CLEARANCE: PERMISSION AND SECURITY CLEARANCE TO CONDUCT THE STUDY FOR DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION ZELDA BISSCHOFF

Research topic: "**A Soft Skills Competency Framework for the Enhancement of Intern Employability within Eskom** (Research Report: Human Resource Development)

Ms Zelda Bisschoff has followed due internal processes in terms of gaining permission for this research. This letter serves as permission and security clearance for the PhD level research and write-up by Ms Zelda Bisschoff. The following conditions will apply to the permission rendered:

1. Intellectual Property Rights

All rights, title and interest in and to the Intellectual property of the experimental based research, research results and questionnaires developed by Mrs Z S Bisschoff shall remain vested with Eskom.

2. Publication Protocol

Eskom recognises that under the academic policies of University of Free State, the results of research work must be publishable and agrees that the Researchers engaged in the research shall be permitted to present a symposia, at national or regional professional meetings and to publish in journals, theses or dissertations, or other methods of reporting of their own choice, results of the Research.

The University of the Free State may publish or allow the publication of the proprietary data of Eskom, on whatever medium, concerning the research provided that this does not affect the

Human Resources
General Manger
58 Schoeman Street
Polokwane
Tel + +27152301443 Fax +27829907768
Eskom Holdings SOC Ltd Reg No 2002/015527/30

protection of Intellectual Property Rights. Eskom shall be given 30 (thirty) days prior written notice of any planned publication of the research to take steps necessary to protect its rights.

If, before the end of this period, Eskom so request, a copy of the planned publication shall be provided to Eskom within 30 (thirty) days after receipt of such request. Eskom may require the removal of any or all of its Confidential Information or Intellectual Property from a planned publication in order to protect its proprietary rights and interests and the Researchers will be required to comply with any such requirement prior to publication.

Eskom may object to the planned publication within 30 (thirty) days after receipt thereof. The planned publication shall be suspended until the end of this consultation period, not exceeding twelve (12) months. In the absence of any objection within the above-mentioned period, it is deemed that the Eskom agrees to the publication.

3. Copyright

Copyright in proprietary data, including the content of the questionnaire, remains vested with Eskom. The questionnaire should be marked with the copyright notice which is as follows: " © Eskom Holdings SOC Ltd 2018."

Copyright in Academic Works (the thesis, as submitted to the UFS library) shall solely vest in University of the Free State. The University of the Free State shall acknowledgement Eskom as the copyright owner of the Intellectual property of the experimental based research, research results, and questionnaires, and if applicable, in other publications.

It must be noted that this general clearance is for a limited period only, which will be for the rest of the financial year 2018 till December 2019.

Yours sincerely

Elsie Pule

GROUP EXECUTIVE: HUMAN RESOURCES

APPENDIX H

ETHICAL CLEARANCE PHASE 1

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA
UFS·UV
ECONOMIC AND MANAGEMENT SCIENCES
EKONOMIESE EN BESTUURSWETENSKAPPE

Faculty of Economic and Management Sciences

07-Dec-2017

Dear **Mrs Zelda Bisschoff**

Ethics Clearance: **A Soft Skills Competency Framework for the Enhancement of Intern Employability Within Eskom**

Principal Investigator: **Mrs Zelda Bisschoff**

Department: **Univ of the Free State:Business School (Bloemfontein Campus)**

APPLICATION APPROVED

With reference to you application for ethical clearance with the Faculty of Economic & Management Sciences, I am pleased to inform you on behalf of the Ethics Committee of the faculty that you have been granted ethical clearance for your research.

Your ethical clearance number, to be used in all correspondence is: **UFS-HSD2017/1360**

This ethical clearance number is valid from **07-Dec-2017** to **07-Dec-2022**. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the ethics office to ensure we are kept up to date with your progress and any ethical implications that may arise.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours Sincerely

Dr. Petrus Nel
Chairperson: Ethics Committee Faculty of Economic & Management Sciences

Economics Ethics Committee
Office of the Dean: Economic and Management Sciences
T: +27 (0)51 401 2310 | T: +27(0)51 401 9111 | F: +27(0)51 444 5465
205 Nelson Mandela Drive/Rylaan, Park West/Parkweg, Bloemfontein 9301, South Africa/Suid Afrika
P.O. Box/Posbus 339, Bloemfontein 9300, South Africa/Soud Afrika
www.ufs.ac.za

APPENDIX I

ETHICAL CLEARANCE PHASE 2

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA

UFS UV

GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

05-Jun-2019

Dear Mrs Bisschoff, Zelda ZS

Application Approved

Research Project Title:
ETHICAL CLEARANCE NUMBER UFS-HSD2017/1360: CLEARANCE REQUEST FOR PHASE 2 OF RESEARCH EXPERIMENT

Ethical Clearance number:
UFS-HSD2019/0368/0506

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Yours sincerely

Prof Derek Litthauer
Chairperson: General/Human Research Ethics Committee

Digitally signed by Derek Litthauer
Date: 2019.06.05 10:47:08 +02'00'

205 Nelson Mandela Drive/Rylaan
Park West/Parkwes
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Willa.hrec@ufs.ac.za
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APPENDIX J

SOFT SKILL BEHAVIOUR DESCRIPTIVE STATISTICS

Item	Soft Skill/sub-skill	Rank based on mean	Median	Mode	Max	Min	Outliers	Mean	Var	SD	SE	Skewness	W-stat	p-value	Kurtosis	Range
Take care of your personal safety	Ensure Zero Harm	1	6	6	6	2	2	5.38	0.601	0.78	0.045	-1.048	0.746	0	0.524	4
Drug free	Responsible behaviours	2	6	6	6	1	2	5.37	1.005	1.00	0.058	-1.793	0.671	0	3.420	5
Meet deadlines	Commitment	3	5	6	6	3	None	5.28	0.550	0.74	0.043	-0.610	0.787	0	-0.607	3
Raises compliance, ethical or other issues to protect the Organisation?s reputation and obligations.	Governance	4	5	6	6	2	2	5.27	0.675	0.82	0.047	-1.119	0.780	0	1.427	4
Personal integrity	Ethical conduct	5	5	6	6	1	1	5.23	0.680	0.82	0.047	-0.833	0.782	0	0.889	5
Honesty in actions	Ethical conduct	6	5	6	6	3	None	5.19	0.663	0.81	0.047	-0.621	0.813	0	-0.510	3
Uphold the ethics and values of the company and workplace.	Ethical conduct	7	5	6	6	2	None	5.18	0.718	0.85	0.049	-0.522	0.786	0	-0.824	4
Plan and manage time	Planning	8	5	5	6	3	None	5.14	0.508	0.71	0.041	-0.277	0.811	0	-0.807	3
Demonstrate a positive attitude	Manage Emotions	9	5	5	6	2	2	5.13	0.534	0.73	0.042	-0.470	0.813	0	0.086	4
Comply with policies, directives and procedures	Compliance with Rules	10	5	6	6	2	None	5.13	0.777	0.88	0.051	-0.639	0.799	0	-0.161	4
Knows and respects the Organisation's Code of Conduct and values	Compliance with Rules	11	5	6	6	2	None	5.10	0.732	0.86	0.049	-0.474	0.808	0	-0.492	4
Have a self-starting attitude in pursuit of goals	Apply-Self	12	5	5	6	2	2	5.08	0.532	0.73	0.042	-0.385	0.818	0	0.015	4
Accept responsibility for own decisions and actions	Responsible behaviours	13	5	5	6	2	2	5.07	0.563	0.75	0.043	-0.356	0.823	0	-0.224	4
Accept the consequences of own behaviour and actions	Responsible behaviours	14	5	5	6	3	None	5.07	0.543	0.74	0.042	-0.163	0.818	0	-0.990	3
Consult with others when uncertain	Commitment	15	5	5	6	3	None	5.06	0.591	0.77	0.044	-0.153	0.816	0	-1.165	3
Ability to control own emotions and behaviour, particularly in difficult situations or under stress	Manage Emotions	16	5	5	6	2	2	5.04	0.573	0.76	0.044	-0.350	0.827	0	-0.191	4
Drive safety consciousness in workplace.	Ensure Zero Harm	17	5	6	6	1	None	5.02	0.883	0.94	0.054	-0.864	0.825	0	1.014	5
Work to quality standards	Apply-Self	18	5	5	6	2	None	5.01	0.651	0.81	0.046	-0.433	0.835	0	-0.010	4
Comply with all Environmental policies and legislation	Ensure Zero Harm	19	5	6	6	1	None	5.00	1.020	1.01	0.058	-0.967	0.806	0	1.554	5
Identify the root cause behind a problem	Analytical	20	5	5	6	1	None	4.99	0.864	0.93	0.053	-0.863	0.832	0	1.125	5
Respect for others	Diversity Management	21	5	5	6	2	None	4.98	0.654	0.81	0.047	-0.425	0.826	0	0.203	4
Seek more information to understand a problem	Analytical	22	5	5	6	2	None	4.98	0.584	0.76	0.044	-0.326	0.837	0	-0.130	4
Being willing to learn new skills	Self-Development	23	5	5	6	2	None	4.96	0.570	0.75	0.043	-0.167	0.827	0	-0.411	4
Take care of own health	Ensure Zero Harm	24	5	5	6	1	None	4.95	0.795	0.89	0.051	-0.673	0.839	0	0.863	5
Take care of others' safety	Ensure Zero Harm	25	5	6	6	1	None	4.94	0.950	0.97	0.056	-0.710	0.830	0	0.562	5
Direct energy towards the completion of a goal	Commitment	26	5	5	6	2	None	4.94	0.541	0.74	0.042	-0.258	0.831	0	-0.009	4
Cooperative and supportive when working in a team	Team Contribution	27	5	5	6	2	None	4.93	0.594	0.77	0.044	-0.148	0.833	0	-0.473	4
Adapt to requirements that are changing	Adaptable	28	5	5	6	2	None	4.92	0.707	0.84	0.048	-0.448	0.849	0.001	0.137	4
Caring about company success	Commitment	29	5	5	6	2	None	4.91	0.859	0.93	0.053	-0.550	0.853	0.001	0.044	4
Consider cost savings.	Decision-making	30	5	5	6	1	None	4.91	1.121	1.06	0.061	-1.064	0.831	0	1.280	5
Keep up to date on technical knowledge and new	Self-Development	31	5	5	6	2	None	4.91	0.616	0.78	0.045	-0.041	0.826	0	-0.706	4
Working across different ages irrespective of gender, race, religion or political	Diversity Management	32	5	5	6	1	None	4.90	0.878	0.94	0.054	-0.758	0.832	0	1.300	5

Pay attention to detail	Analytical	33	5	5	6	2	None	4.90	0.658	0.81	0.047	-0.458	0.834	0	0.578	4
Personal commitment to execute a given task	Commitment	34	5	5	6	2	None	4.89	0.673	0.82	0.047	-0.308	0.850	0.001	-0.139	4
Monitor own performance to reach deadlines and milestones	Commitment	35	5	5	6	3	None	4.88	0.550	0.74	0.043	0.098	0.824	0	-0.956	3
Being courteous and respectful	Manage Emotions	36	5	5	6	2	None	4.87	0.658	0.81	0.047	-0.210	0.844	0.001	-0.227	4
Think logical	Analytical	37	5	5	6	2	None	4.87	0.631	0.79	0.046	-0.282	0.833	0	0.219	4
Think logical manner when approaching problems or	Analytical	38	5	5	6	2	None	4.87	0.578	0.76	0.044	-0.048	0.832	0	-0.452	4
Weighing up risk, evaluate alternatives and apply evaluation	Decision-making	39	5	5	6	1	None	4.87	0.806	0.90	0.052	-0.758	0.849	0.001	1.238	5
Seek ways to improve own knowledge and skills	Self-Development	40	5	5	6	2	None	4.86	0.576	0.76	0.044	-0.043	0.831	0	-0.451	4
Punctual work attendance	Compliance with Rules	41	5	5	6	2	None	4.86	0.795	0.89	0.051	-0.519	0.847	0.001	0.388	4
Resolving customer concerns to customer satisfaction	Customer Care	42	5	5	6	1	None	4.86	0.765	0.87	0.050	-0.625	0.828	0	1.534	5
Be willing to continuously learn	Self-Development	43	5	5	6	2	None	4.85	0.617	0.79	0.045	-0.067	0.823	0	-0.298	4
The ability to see the bigger picture.	Analytical	44	5	5	6	2	None	4.85	0.729	0.85	0.049	-0.356	0.857	0.001	-0.032	4
Self-motivation to stay focused and committed to a task	Self-Motivation	45	5	5	6	3	None	4.83	0.557	0.75	0.043	0.235	0.812	0	-1.072	3
Responds to and anticipates client needs in a timely, professional, helpful and courteous manner	Customer Care	46	5	5	6	1	1	4.83	0.719	0.85	0.049	-0.490	0.839	0	1.029	5
Strives to consistently meet service standards.	Customer Care	47	5	5	6	2	None	4.83	0.634	0.80	0.046	-0.033	0.827	0	-0.355	4
Follow up on goals, tasks and assignments to assure successful completion	Commitment	48	5	5	6	1	1	4.82	0.670	0.82	0.047	-0.761	0.820	0	2.506	5
Practice responsible behaviour.	Responsible behaviours	49	5	5	6	2	None	4.81	0.618	0.79	0.045	-0.018	0.827	0	-0.282	4
Takes advantage of learning opportunities provided	Self-Development	50	5	5	6	2	None	4.81	0.627	0.79	0.046	0.078	0.831	0	-0.667	4
Managing own learning	Self-Development	51	5	5	6	1	1	4.80	0.707	0.84	0.048	-0.685	0.831	0	2.035	5
Assess, weigh and manage risk	Decision-making	52	5	5	6	1	1	4.79	0.901	0.95	0.055	-1.006	0.832	0	2.237	5
Deal with people, problems and situations with honesty, integrity and personal ethics	Ethical conduct	53	5	4	6	2	None	4.79	0.783	0.89	0.051	-0.242	0.852	0.001	-0.178	4
Manages assignments? delivery process and deadlines	Commitment	54	5	5	6	1	1	4.79	0.664	0.81	0.047	-0.337	0.830	0	0.986	5
Drive action to achieve goals	Commitment	55	5	5	6	1	1	4.78	0.627	0.79	0.046	-0.354	0.824	0	1.266	5
Having enthusiasm for ongoing learning	Self-Development	56	5	5	6	2	None	4.78	0.643	0.80	0.046	-0.363	0.826	0	0.763	4
The ability to identify the resources needed to accomplish a given task.	Planning	57	5	5	6	1	1	4.78	0.855	0.92	0.053	-0.941	0.837	0	2.252	5
The ability to see different types of solutions for a given	Decision-making	58	5	5	6	2	None	4.78	0.656	0.81	0.047	-0.291	0.853	0.001	0.223	4
Work independently or as a team player	Team Contribution	59	5	5	6	2	None	4.78	0.645	0.80	0.046	-0.042	0.839	0	-0.283	4
Aware of impact of own actions	Self-Awareness	60	5	5	6	1	1	4.78	0.684	0.83	0.048	-0.410	0.833	0	1.140	5
Learn from own and others' mistakes	Self-Development	61	5	5	6	3	None	4.77	0.521	0.72	0.042	0.261	0.813	0	-0.855	3
Understanding the needs of internal and external customers	KnowYBusiness	62	5	5	6	2	None	4.77	0.640	0.80	0.046	0.076	0.837	0	-0.623	4
Accept feedback and take responsibility	Apply-Self	63	5	5	6	2	None	4.77	0.580	0.76	0.044	0.135	0.823	0	-0.535	4

Communicate effectively with people from different cultures, backgrounds, and authority levels	Diversity Management	64	5	4	6	2	None	4.77	0.786	0.89	0.051	-0.256	0.848	0.001	-0.014	4
Recognize and respect people's diversity, individual differences and perspectives	Diversity Management	65	5	4	6	2	None	4.77	0.741	0.86	0.050	-0.071	0.840	0	-0.372	4
Set goals and priorities that will balance work and personal	Responsible behaviours	66	5	5	6	1	1	4.77	0.808	0.90	0.052	-0.634	0.851	0.001	1.367	5
Keeps clients up-to-date on the progress of the service they are receiving and changes that affect them.	Customer Care	67	5	5	6	2	None	4.77	0.794	0.89	0.051	-0.352	0.862	0.001	0.073	4
Be accountable for own actions and the actions of group	Team Contribution	68	5	4	6	2	None	4.76	0.700	0.84	0.048	-0.134	0.850	0.001	-0.130	4
Personal energy	Self-Motivation	69	5	5	6	1	1	4.76	0.722	0.85	0.049	-0.723	0.844	0.001	1.604	5
Ability to separate emotions from situations	Manage Emotions	70	5	5	6	2	None	4.75	0.725	0.85	0.049	-0.345	0.852	0.001	0.343	4
Taking initiative	Apply-Self	71	5	5	6	2	None	4.75	0.652	0.81	0.046	-0.351	0.835	0	0.710	4
Willingness to listen to what others are saying	Emotional Intelligence	72	5	4	6	3	None	4.75	0.574	0.76	0.044	0.413	0.795	0	-1.067	3
To hear, understand and follow directions.	Compliance with Rules	73	5	4	6	2	None	4.75	0.627	0.79	0.046	0.085	0.842	0.001	-0.524	4
Maintains continuous, open and consistent communication with others.	Communication	74	5	5	6	2	None	4.74	0.576	0.76	0.044	0.100	0.812	0	-0.157	4
Adapts to new ideas and initiatives relevant to own area of	Adaptable	75	5	5	6	2	None	4.74	0.622	0.79	0.045	-0.203	0.844	0.001	0.273	4
Translating ideas into action	Commitment	76	5	5	6	2	None	4.74	0.730	0.85	0.049	-0.375	0.857	0.001	0.362	4
Reflecting on and learning from own actions.	Self-Development	77	5	4	6	2	None	4.74	0.565	0.75	0.043	0.245	0.811	0	-0.533	4
Learn from peers	Self-Development	78	5	5	6	2	None	4.74	0.594	0.77	0.044	-0.119	0.828	0	0.293	4
Be confident	Self-Believe	79	5	4	8	2	8	4.73	0.915	0.96	0.055	0.078	0.875	0.001	0.837	6
Developing creative, innovative solutions	Innovation	80	5	5	6	2	None	4.73	0.808	0.90	0.052	-0.492	0.863	0.001	0.432	4
Find the true cause of problems before acting	Problem Solving	81	5	5	6	1	1	4.73	0.801	0.90	0.052	-0.561	0.861	0.001	0.913	5
Avoid jumping to premature conclusions	Manage Emotions	82	5	5	6	1	1	4.73	0.734	0.86	0.049	-0.398	0.856	0.001	0.833	5
Reporting dishonesty of others	Ethical conduct	83	5	4	6	1	None	4.73	1.095	1.05	0.060	-0.676	0.862	0.001	0.728	5
Ability to identify problems and devise solutions	Problem Solving	84	5	5	6	1	1	4.72	0.698	0.84	0.048	-0.439	0.836	0	1.246	5
Show interest, motivation, and effort	Self-Motivation	85	5	5	6	2	None	4.72	0.541	0.74	0.042	0.207	0.817	0	-0.365	4
Being willing to learn in any setting - on and off the job	Self-Development	86	5	5	6	2	None	4.71	0.616	0.78	0.045	-0.194	0.829	0	0.516	4
Manage own emotions	Manage Emotions	87	5	4	6	1	1	4.71	0.841	0.92	0.053	-0.436	0.835	0	1.043	5
Makes a positive contribution in team	Team Contribution	88	5	5	6	2	None	4.71	0.552	0.74	0.043	0.099	0.815	0	0.018	4
A positive orientation toward own worth or value	Self-Believe	89	5	4	6	2	None	4.71	0.651	0.81	0.046	-0.057	0.843	0.001	0.030	4
Structure information in a way that meets the needs of the	Communication	90	5	5	6	1	1	4.70	0.759	0.87	0.050	-0.474	0.860	0.001	0.900	5
Can give accurate explanations of information and data	Communication	91	5	5	6	1	1	4.70	0.653	0.81	0.046	-0.544	0.819	0	1.855	5
Can present ideas and opinions clearly	Communication	92	5	5	6	2	None	4.70	0.580	0.76	0.044	-0.254	0.826	0	0.784	4
Expresses own opinion while remaining factual and	Manage Emotions	93	5	5	6	2	None	4.70	0.694	0.83	0.048	-0.600	0.835	0	1.245	4
Make rational judgment from analysing information and data	Decision-making	94	5	4	6	1	1	4.70	0.722	0.85	0.049	-0.452	0.837	0	1.245	5
Set realistic goals	Planning	95	5	5	6	1	1	4.69	0.625	0.79	0.046	-0.200	0.836	0	0.901	5
Focus on problem solutions	Problem Solving	96	5	5	6	1	1	4.69	0.765	0.87	0.050	-0.611	0.843	0.001	1.678	5
Understand the strategic goals of the Organisation.	KnowYBusiness	97	5	4	6	1	1	4.69	0.899	0.95	0.055	-0.583	0.844	0.001	1.348	5

Manages the work plan, sets timelines and milestones, and involves stakeholders to deliver on time.	Planning	98	5	5	6	1	1	4.68	1.106	1.05	0.061	-1.010	0.845	0.001	1.599	5
The ability to form working relationships	Social Intelligence	99	5	5	6	2	None	4.68	0.616	0.78	0.045	-0.196	0.836	0	0.537	4
Holistic consideration of solutions to problem	Problem Solving	100	5	5	6	1	1	4.68	0.803	0.90	0.052	-0.545	0.851	0.001	1.090	5
Is able to explain how own work relates to the goals of the Organisation.	KnowYBusiness	101	5	4	6	1	1	4.68	0.770	0.88	0.050	-0.536	0.840	0	1.288	5
To confront difficult issues in an objective and non-emotional	Manage Emotions	102	5	4	6	2	None	4.68	0.710	0.84	0.048	-0.166	0.844	0.001	0.262	4
Set priorities with a proper sense of urgency and importance	Planning	103	5	4	6	2	None	4.68	0.565	0.75	0.043	0.094	0.821	0	0.009	4
Prioritise self-development to enhance competencies, knowledge and skills	Self-Development	104	5	5	6	2	None	4.67	0.667	0.82	0.047	-0.279	0.845	0.001	0.546	4
Take the credit or blame for the results of own work	Responsible behaviours	105	5	5	6	1	1	4.66	0.841	0.92	0.053	-0.765	0.853	0.001	1.605	5
Belief in own ability to succeed in a particular situation	Self-Believe	106	5	4	6	2	None	4.66	0.742	0.86	0.050	-0.194	0.843	0.001	0.302	4
Stays open-minded and encourages others to bring new perspectives.	Continuous Improvement	107	5	5	6	1	1	4.66	0.683	0.83	0.048	-0.528	0.838	0	1.538	5
Show respect for the views and contributions of other team	Diversity Management	108	5	4	6	2	None	4.65	0.585	0.76	0.044	0.052	0.817	0	0.250	4
Speaking clearly and directly	Communication	109	5	5	6	1	1	4.65	0.637	0.80	0.046	-0.430	0.827	0	1.623	5
Dependable	Team Contribution	110	5	5	6	1	1	4.65	1.145	1.07	0.062	-0.802	0.870	0.001	0.684	5
Develop a plan, revise, adjust, implement	Planning	111	5	4	6	1	1	4.65	0.813	0.90	0.052	-0.613	0.845	0.001	1.535	5
The ability to evaluate future implications of current decisions and actions.	Decision-making	112	5	5	6	1	1	4.65	0.846	0.92	0.053	-0.713	0.845	0.001	1.611	5
Share information willingly	Communication	113	5	5	6	2	None	4.64	0.735	0.86	0.049	-0.226	0.869	0.001	0.053	4
Work on own	Apply-Self	114	5	4	6	1	1	4.64	0.920	0.96	0.055	-0.424	0.866	0.001	0.495	5
Being open to new ideas and techniques	Innovation	115	5	4	6	2	None	4.64	0.523	0.72	0.042	0.198	0.800	0	0.142	4
Presents factual material in a concise manner.	Communication	116	5	5	6	2	None	4.64	0.594	0.77	0.044	-0.140	0.847	0.001	0.390	4
Creative Thinking	Innovation	117	5	5	6	1	1	4.64	0.882	0.94	0.054	-0.596	0.867	0.001	0.874	5
The ability to be objective in evaluating different situations	Emotional Intelligence	118	5	4	6	2	None	4.63	0.615	0.78	0.045	-0.205	0.830	0	0.771	4
Meaningful contribution to problem-solving	Problem Solving	119	5	4	6	2	None	4.63	0.630	0.79	0.046	-0.001	0.825	0	0.344	4
Have a positive and open attitude toward others	Social Intelligence	120	5	4	6	1	1	4.63	0.632	0.79	0.046	-0.162	0.800	0	1.652	5
Follows-up with clients during and after the delivery of services to ensure that their needs have been met	Customer Care	121	5	4	6	1	1	4.62	0.880	0.94	0.054	-0.733	0.829	0	2.084	5
Ability to interact appropriately with other people, without undue conflict or discomfort	Social Intelligence	122	5	4	6	1	1	4.62	0.647	0.80	0.046	-0.053	0.817	0	0.882	5
Make decisions that takes into account all aspects and	Decision-making	123	5	5	6	1	1	4.62	0.920	0.96	0.055	-0.998	0.831	0	2.311	5
Seek better ways to do things	Continuous Improvement	124	5	5	6	1	1	4.62	0.682	0.83	0.048	-0.653	0.824	0	1.904	5
Awareness of how organisation works	KnowYBusiness	125	5	4	6	1	1	4.62	0.874	0.93	0.054	-0.371	0.850	0.001	0.660	5
Understands the reason behind, or motivation for own	Self-Awareness	126	5	4	6	2	None	4.62	0.608	0.78	0.045	-0.102	0.832	0	0.509	4
Prioritises clients' issues and address them accordingly.	Customer Care	127	5	4	6	1	1	4.62	0.821	0.91	0.052	-0.679	0.839	0	1.706	5
To understand a given situation and to act appropriately	Manage Emotions	128	5	4	6	1	1	4.62	0.665	0.82	0.047	-0.439	0.833	0	1.567	5

Consider a wide range of alternatives prior to making a	Decision-making	129	5	5	6	2	None	4.62	0.676	0.82	0.047	-0.268	0.853	0.001	0.479	4
Clearly shows clients that their perspectives are valued	Customer Care	130	5	4	6	1	1	4.61	0.713	0.84	0.049	-0.296	0.849	0.001	0.989	5
Applying problem solving strategies across a range of areas	Problem Solving	131	5	4	6	2	None	4.61	0.670	0.82	0.047	-0.234	0.837	0	0.674	4
Be able to respond constructively to change	Adaptable	132	5	4	6	2	None	4.61	0.584	0.76	0.044	-0.058	0.818	0	0.599	4
See the details, compare with a standard and identify flaws.	Analytical	133	5	4	6	1	1	4.61	0.797	0.89	0.051	-0.530	0.833	0	1.788	5
Ability to confidently express views or needs without either aggression/ dominance / undue submissiveness towards	Self-Believe	134	5	4	6	2	None	4.61	0.737	0.86	0.049	-0.196	0.853	0.001	0.331	4
Fosters trust in teams	Social Intelligence	135	5	4	6	1	1	4.61	0.716	0.85	0.049	-0.468	0.841	0.001	1.681	5
Developing practical solutions	Innovation	136	5	4	6	1	1	4.60	0.671	0.82	0.047	-0.541	0.827	0	2.087	5
Accept and provide feedback in a constructive and considerate manner	Manage Emotions	137	5	4	6	2	None	4.60	0.551	0.74	0.043	0.106	0.808	0	0.429	4
Listens to differing points of view and promotes mutual	Team Contribution	138	5	4	6	2	None	4.60	0.638	0.80	0.046	-0.016	0.834	0	0.336	4
Ability to act objectively	Manage Emotions	139	5	4	6	2	None	4.60	0.653	0.81	0.046	-0.211	0.830	0	0.742	4
Consider various options and their consequences of	Decision-making	140	4.7	4	6	1	1	4.60	0.603	0.78	0.045	-0.260	0.803	0	1.762	5
Capacity to deal with competing work demands/challenges	Resilience	141	4.3	4	6	2	None	4.60	0.598	0.77	0.045	0.067	0.811	0	0.487	4
Collect, analyse and organise information	Analytical	142	5	4	6	1	1	4.59	0.664	0.81	0.047	-0.420	0.834	0	1.532	5
Demonstrates understanding of the general environment in which the Organisation operates.	KnowYBusiness	143	5	4	6	2	None	4.59	0.717	0.85	0.049	-0.319	0.843	0.001	0.797	4
Willingness to take on more responsibility	Team Contribution	144	5	4	6	1	1	4.59	0.753	0.87	0.050	-0.480	0.847	0.001	1.244	5
Contributes to improve work methods, outcomes and team performance.	Continuous Improvement	145	5	5	6	1	1	4.59	0.810	0.90	0.052	-0.904	0.830	0	2.444	5
Maintains objectivity when one?s own positions or opinions are challenged by peers or stakeholders.	Resilience	146	5	4	6	2	None	4.59	0.648	0.80	0.046	-0.155	0.824	0	0.746	4
Remains objective when facing criticism	Resilience	147	5	4	6	2	None	4.58	0.581	0.76	0.044	0.009	0.833	0	0.362	4
Being resourceful	Innovation	148	4	4	6	1	1	4.58	0.716	0.85	0.049	-0.146	0.829	0	0.872	5
Can manage continuous change	Resilience	149	5	4	6	1	1	4.58	0.875	0.94	0.054	-0.619	0.850	0.001	1.350	5
Understands and recognises the value of other points of view and ways of doing things.	Diversity Management	150	4	4	6	2	None	4.58	0.535	0.73	0.042	0.232	0.785	0	0.471	4
Develop plans for specific goals and tasks	Planning	151	5	4	6	1	1	4.58	0.636	0.80	0.046	-0.357	0.829	0	1.493	5
Manage stressful situations	Emotional Intelligence	152	4	4	6	1	1	4.58	0.682	0.83	0.048	-0.212	0.832	0	1.114	5
Use appropriate vocabulary and grammar when communicating with others	Communication	153	5	4	6	2	None	4.57	0.876	0.94	0.054	-0.427	0.867	0.001	0.419	4
Be cultural sensitive	Diversity Management	154	4.6	4	6	1	1	4.57	0.961	0.98	0.056	-0.463	0.869	0.001	0.709	5
Defines ambitious, but realistic, personal goals.	Self-Development	155	5	5	6	1	1	4.57	0.755	0.87	0.050	-0.641	0.842	0.001	1.539	5
Distinguishes between critical and irrelevant pieces of	Analytical	156	5	4	6	1	1	4.57	0.797	0.89	0.051	-0.489	0.853	0.001	1.327	5
Checks own understanding of others' communication before responding	Manage Emotions	157	4.8	4	6	2	None	4.57	0.611	0.78	0.045	-0.123	0.826	0	0.726	4
Successfully implement knowledge in daily activities	Apply-Self	158	4	4	6	1	1	4.56	0.651	0.81	0.046	-0.216	0.823	0	1.319	5
Share learnings with peers	Continuous Improvement	159	4.8	4	6	2	None	4.56	0.664	0.81	0.047	-0.284	0.838	0	0.883	4

Anticipating problems before they happen.	Ensure Zero Harm	160	5	4	6	1	1	4.55	0.898	0.95	0.055	-0.512	0.872	0.001	0.720	5
Identifies gaps in information	Analytical	161	5	4	6	2	None	4.55	0.693	0.83	0.048	-0.391	0.830	0	1.071	4
Takes new initiatives aimed at improving team performance.	Continuous Improvement	162	5	4	6	1	1	4.53	0.773	0.88	0.051	-0.679	0.839	0	1.863	5
Identify where improvement could occur	Continuous Improvement	163	4	4	6	1	1	4.52	0.688	0.83	0.048	-0.396	0.822	0	1.573	5
Understanding basic business systems and their	KnowYBusiness	164	4	4	6	2	None	4.52	0.740	0.86	0.049	-0.122	0.836	0	0.574	4
The ability to listen to many points of view without bias.	Emotional Intelligence	165	4	4	6	1	1	4.52	0.721	0.85	0.049	-0.500	0.837	0	1.477	5
Tackle demanding goals with enthusiasm	Apply-Self	166	4	4	6	2	None	4.52	0.628	0.79	0.046	0.126	0.840	0	0.189	4
Solving problems in teams	Problem Solving	167	4	4	6	1	1	4.51	0.742	0.86	0.050	-0.407	0.835	0	1.593	5
Promotes and encourages others to keep up-to-date with the Organisation?s rules, structures, decision-making bodies,	Compliance with Rules	168	4	4	6	1	1	4.51	1.087	1.04	0.060	-0.748	0.856	0.001	1.332	5
Can break information into component parts to see relationships and patterns	Analytical	169	4	4	6	1	1	4.50	0.727	0.85	0.049	-0.385	0.858	0.001	1.091	5
Assumes additional responsibilities to facilitate the achievement of team goals	Team Contribution	170	4	4	6	1	1	4.50	0.781	0.88	0.051	-0.456	0.862	0.001	1.026	5
Define objectives	Planning	171	4	4	6	1	1	4.50	0.869	0.93	0.054	-0.672	0.852	0.001	1.612	5
Anticipates clients' upcoming needs and concerns.	KnowYBusiness	172	4	4	6	1	1	4.50	0.914	0.96	0.055	-0.583	0.862	0.001	1.103	5
Makes efforts to optimise process workflows efficiently	Continuous Improvement	173	4	4	6	1	1	4.49	0.802	0.90	0.052	-0.608	0.840	0	1.637	5
Challenge existing practices in order to become more	Continuous Improvement	174	4	4	6	1	1	4.49	0.871	0.93	0.054	-0.546	0.866	0.001	0.955	5
Come up with innovative ideas	Innovation	175	4	4	6	1	1	4.49	0.708	0.84	0.048	-0.260	0.820	0	1.361	5
Considers problems from all new perspectives	Problem Solving	176	4	4	6	2	None	4.49	0.648	0.81	0.046	-0.105	0.836	0	0.690	4
Work within group dynamics	Social Intelligence	177	4	4	6	2	None	4.48	0.556	0.75	0.043	0.105	0.805	0	0.755	4
Encourages others to contribute by overcoming cultural barriers and background differences	Diversity Management	178	4	4	6	2	None	4.48	0.721	0.85	0.049	-0.276	0.845	0.001	0.780	4
Negotiating responsively	Team Contribution	179	5	5	6	1	1	4.48	0.827	0.91	0.052	-0.579	0.874	0.001	0.811	5
The ability to balance and defuse inner tensions and	Manage Emotions	180	4	4	6	2	None	4.47	0.668	0.82	0.047	-0.148	0.837	0	0.755	4
Avoid complicated language when presenting ideas or	Communication	181	4	4	6	1	1	4.47	1.027	1.01	0.058	-0.767	0.847	0.001	1.269	5
Ability to support the weak team members	Team Contribution	182	4	4	6	1	1	4.47	0.999	1.00	0.058	-0.662	0.872	0.001	1.058	5
Have realistic expectation from others that can be met	Diversity Management	183	4	4	6	2	None	4.46	0.645	0.80	0.046	-0.152	0.833	0	0.895	4
Provides constructive feedback to others	Communication	184	4	4	6	2	None	4.46	0.743	0.86	0.050	-0.452	0.843	0.001	1.049	4
Recognize the good efforts of self and others	Social Intelligence	185	4	4	6	1	1	4.46	0.813	0.90	0.052	-0.491	0.841	0.001	1.232	5
Expresses negative feelings constructively	Manage Emotions	186	4	4	6	1	1	4.46	0.719	0.85	0.049	-0.440	0.831	0	1.515	5
Consistently clean, tidy and appropriately dressed, with a polite and professional manner	Self-Believe	187	4	4	6	1	1	4.45	1.013	1.01	0.058	-0.532	0.862	0.001	0.961	5
Proposes ways to do things differently	Continuous Improvement	188	4	4	6	1	1	4.45	0.636	0.80	0.046	-0.258	0.831	0	1.517	5
Ability to confront people problems to resolve conflicts in a constructive manner	Problem Solving	189	4	4	6	1	1	4.45	0.943	0.97	0.056	-0.806	0.844	0.001	1.775	5
Resilience to negative feedback.	Resilience	190	4	4	6	1	1	4.45	0.737	0.86	0.049	-0.346	0.856	0.001	1.082	5
Realistic in expectations of others	Social Intelligence	191	4	4	6	2	None	4.45	0.668	0.82	0.047	-0.381	0.844	0.001	1.053	4
The ability to respond and integrate change with minimal	Adaptable	192	4	4	6	1	1	4.44	0.734	0.86	0.049	-0.654	0.842	0.001	1.926	5
Understands others' complex or underlying needs, motivation, emotions or concerns and adjusts	Emotional Intelligence	193	4	4	6	2	None	4.44	0.964	0.98	0.057	-0.345	0.876	0.001	0.215	4

Understand the role of conflict in a group in reaching	Social Intelligence	194	4	4	6	1	1	4.44	0.884	0.94	0.054	-0.603	0.843	0.001	1.764	5
Being assertive	Self-Believe	195	4	4	6	1	1	4.43	0.851	0.92	0.053	-0.421	0.865	0.001	0.825	5
Adapting resource allocations to cope with contingencies and changes	Adaptable	196	4	4	6	1	1	4.43	0.901	0.95	0.055	-0.720	0.851	0.001	1.765	5
Invites and builds upon the ideas of others.	Team Contribution	197	4	4	6	1	1	4.43	0.668	0.82	0.047	-0.392	0.847	0.001	1.355	5
Establishing and using networks	Planning	198	4	4	6	1	1	4.42	0.823	0.91	0.052	-0.447	0.860	0.001	0.961	5
A caring attitude	Emotional Intelligence	199	4	4	6	1	1	4.42	0.880	0.94	0.054	-0.413	0.847	0.001	1.161	5
Organise and motivate people to get things done.	Team Contribution	200	4.5	4	6	1	1	4.42	1.310	1.14	0.066	-0.978	0.852	0.001	1.259	5
Encourages people with opposing viewpoints to express their concerns.	Team Contribution	201	4	4	6	1	1	4.42	0.852	0.92	0.053	-0.590	0.849	0.001	1.170	5
Can motivate others toward action.	Team Contribution	202	4	4	6	1	1	4.41	0.899	0.95	0.055	-0.702	0.851	0.001	1.325	5
Initiates collaboration with others and spontaneously assists others in the delivery of their work.	Team Contribution	203	4	4	6	1	1	4.41	0.773	0.88	0.051	-0.666	0.829	0	2.128	5
In a positive manner handle rejection on a personal level	Resilience	204	4	4	6	1	1	4.40	0.730	0.85	0.049	-0.098	0.827	0	1.143	5
Recalls others' main points and takes them into account in own communication	Communication	205	4	4	6	1	1	4.40	0.857	0.93	0.053	-0.664	0.861	0.001	1.478	5
The ability not to judge others	Emotional Intelligence	206	4	4	6	1	1	4.39	1.007	1.00	0.058	-0.533	0.874	0.001	0.909	5
Uses compelling argumentation to convey conclusions and	Apply-Self	207	4	4	6	1	1	4.39	0.784	0.89	0.051	-0.591	0.842	0.001	1.331	5
Considers people?s concerns and adjusts own behaviour in a helpful manner.	Social Intelligence	208	4	4	6	1	1	4.39	0.762	0.87	0.050	-0.308	0.834	0	1.512	5
Awareness of how the external environment influence the organisation	KnowYBusiness	209	4	4	6	1	1	4.38	0.946	0.97	0.056	-0.494	0.874	0.001	0.629	5
Be conscious of the feelings and opinions of others	Emotional Intelligence	210	4	4	6	1	1	4.37	0.798	0.89	0.051	-0.327	0.833	0	1.183	5
Break down processes into its component activities	Analytical	211	4	4	6	1	1	4.36	0.915	0.96	0.055	-0.517	0.861	0.001	1.210	5
Ability to lead others	Team Contribution	212	4	4	6	1	1	4.35	1.196	1.09	0.063	-0.785	0.869	0.001	0.965	5
Gain support from others for recommendations and ideas	Team Contribution	213	4	4	6	1	1	4.34	0.823	0.91	0.052	-0.759	0.838	0	1.836	5
Resolves conflict among team members sensitively and	Team Contribution	214	4	4	6	1	1	4.31	1.165	1.08	0.062	-0.616	0.869	0.001	0.819	5
Gain respect from others.	Social Intelligence	215	4	4	6	1	1	4.31	0.959	0.98	0.056	-0.444	0.875	0.001	0.736	5
Not expecting to be promoted in a short time	Resilience	216	4	4	6	1	1	4.30	1.511	1.23	0.071	-0.596	0.907	0.001	-0.028	5
The ability to motivate others	Team Contribution	217	4	4	6	1	1	4.30	1.066	1.03	0.059	-0.702	0.851	0.001	1.242	5
Perceive and understand the feelings and attitudes of others (Step in other's shoes)	Emotional Intelligence	218	4	4	6	1	1	4.29	1.054	1.03	0.059	-0.463	0.880	0.001	0.540	5
Willingness to work overtime when needed	Apply-Self	219	4	4	6	1	1	4.29	1.176	1.08	0.062	-0.546	0.879	0.001	0.550	5
Understands the reason behind, or motivation for someone?s actions.	Emotional Intelligence	220	4	4	6	1	1	4.28	0.983	0.99	0.057	-0.542	0.865	0.001	0.994	5
Can initiate changes to work or life	Adaptable	221	4	4	6	1	1	4.25	0.818	0.90	0.052	-0.525	0.860	0.001	1.222	5
Make a favorable first impression	Self-Believe	222	4	4	6	1	1	4.24	1.132	1.06	0.061	-0.505	0.883	0.001	0.571	5
Team negotiation skills	Team Contribution	223	4	4	6	1	1	4.21	1.089	1.04	0.060	-0.578	0.861	0.001	0.980	5
Ability to read body language and emotions of others and direct own behaviour appropriately	Manage Emotions	225	4	4	6	1	1	4.17	0.931	0.97	0.056	-0.306	0.860	0.001	0.658	5
Deal constructively with organizational or team politics	Social Intelligence	226	4	4	6	1	1	4.15	1.193	1.09	0.063	-0.710	0.863	0.001	0.928	5
Be socially responsible and contribute to community	Responsible behaviours	227	4	4	6	1	1	4.14	1.192	1.09	0.063	-0.628	0.886	0.001	0.644	5
Empathising	Emotional Intelligence	228	4	4	6	1	1	4.09	0.992	1.00	0.057	-0.467	0.850	0.001	1.021	5
Team facilitation skills	Team Contribution	229	4	4	6	1	1	4.04	1.330	1.15	0.066	-0.543	0.884	0.001	-0.143	5
Adapts arguments to others' needs/interests.	Emotional Intelligence	230	4	4	6	1	1	4.00	1.289	1.14	0.065	-0.591	0.888	0.001	0.234	5
Manage other's emotions	Emotional Intelligence	231	4	4	6	1	None	3.71	1.466	1.21	0.070	-0.338	0.910	0.001	-0.204	5

APPENDIX K

CONFIRMATORY FACTOR ANALYSIS LINKING SOFTS SKILL COMPETENCY BEHAVIOURS TO PRIMARY SOFT SKILLS AND THEIR SUB SKILLS

Adaptable	KMO	Communalities	CF Loading Coefficient	Component Score Coef
Adapt to requirements that are changing	0.871	49%	0.840	0.197
Adapts to new ideas and initiatives relevant to own area of work.	0.88	54%	0.800	0.207
Can initiate changes to work or life	0.908	55%	0.788	0.21
The ability to respond and integrate change with minimal resistance	0.865	64%	0.744	0.226
Be able to respond constructively to change	0.870	71%	0.734	0.237
Adapting resource allocations to cope with contingencies and changes	0.855	62%	0.698	0.222
Innovation	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Developing creative, innovative solutions	0.801	60%	0.774	0.21
Creative Thinking	0.791	64%	0.800	0.217
Being open to new ideas and techniques	0.88	62%	0.788	0.214
Developing practical solutions	0.892	53%	0.729	0.198
Being resourceful	0.893	59%	0.770	0.209
Come up with innovative ideas	0.883	70%	0.839	0.227
Analytical	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Think logical	0.937	57%	0.757	0.138
The ability to see the bigger picture.	0.954	42%	0.604	0.144
Break down processes into its component activities	0.948	52%	0.723	0.131
Can break information into component parts to see relationships and patterns	0.948	64%	0.798	0.145
Distinguishes between critical and irrelevant pieces of information.	0.948	53%	0.728	0.132
Identifies gaps in information	0.937	59%	0.768	0.139
See the details, compare with a standard, and identify flaws.	0.95	64%	0.797	0.145
Collect, analyse and organise information	0.946	61%	0.779	0.141
Think in a logical manner when approaching problems or situations	0.888	48%	0.694	0.126
Seek more information to understand a problem	0.896	42%	0.651	0.118
Identify the root cause behind a problem	0.959	51%	0.713	0.130

Communication	KMO	Communalities	CF Loading Coefficient	Component Score Coef
Presents factual material in a concise manner.	0.944	53%	0.730	0.131
Can give accurate explanations of information and data presented	0.917	62%	0.784	0.140
Structure information in a way that meets the needs of the audience	0.909	55%	0.742	0.133
Can present ideas and opinions clearly	0.946	63%	0.792	0.142
Speaking clearly and directly	0.923	57%	0.758	0.136
Maintains continuous, open, and consistent communication with others.	0.925	38%	0.619	0.111
Share information willingly	0.946	37%	0.605	0.108
Provides constructive feedback to others	0.925	45%	0.670	0.120
Use appropriate vocabulary and grammar when communicating with others	0.916	40%	0.635	0.114
Avoid complicated language when presenting ideas or insights	0.934	51%	0.714	0.128
Recalls others' main points and takes them into account in own communication	0.939	58%	0.759	0.136
Continuous Improvement	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Contributes to improve work methods, outcomes, and team performance.	0.937	65%	0.805	0.152
Stays open-minded and encourages others to bring new perspectives.	0.938	66%	0.811	0.153
Seek better ways to do things	0.939	54%	0.732	0.138
Takes new initiatives aimed at improving team performance.	0.942	60%	0.777	0.147
Makes efforts to optimise process workflows efficiently	0.922	60%	0.772	0.146
Challenge existing practices in order to become more effective.	0.929	57%	0.754	0.143
Identify where improvement could occur	0.923	69%	0.829	0.157
Proposes ways to do things differently	0.945	55%	0.743	0.141
Share learnings with peers	0.919	44%	0.662	0.125
KnowYBusiness	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Is able to explain how own work relates to the goals of the Organisation.	0.937	72%	0.849	0.164
Demonstrates understanding of the general environment in which the Organisation operates.	0.914	72%	0.850	0.165
Awareness of how organisation works	0.888	67%	0.818	0.158
Understand the strategic goals of the Organisation.	0.929	67%	0.818	0.158
Understanding the needs of internal and external customers	0.952	54%	0.737	0.143
Awareness of how the external environment influence the organisation	0.945	58%	0.758	0.147
Understanding basic business systems and their relationships	0.945	61%	0.779	0.151
Anticipates clients' upcoming needs and concerns.	0.922	66%	0.811	0.157

Decision-making	KMO	Communalities	CF Loading Coefficient	Component Score Coef
Consider a wide range of alternatives prior to making a decision	0.929	61%	0.783	0.148
The ability to evaluate future implications of current decisions and actions.	0.924	67%	0.821	0.155
Make decisions that takes into account all aspects and components	0.915	68%	0.824	0.156
Weighing up risk, evaluate alternatives and apply evaluation	0.899	60%	0.774	0.146
Consider cost savings	0.947	35%	0.590	0.111
Assess, weigh and manage risk	0.923	61%	0.782	0.148
The ability to see different types of solutions for a given problem	0.921	58%	0.759	0.143
Consider various options and their consequences of solutions	0.938	61%	0.782	0.148
Make rational judgment from analysing information and data	0.937	59%	0.766	0.145
Problem Solving	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Find the true cause of problems before acting	0.949	60%	0.771	0.137
Holistic consideration of solutions to problem	0.941	67%	0.819	0.145
Ability to identify problems and devise solutions	0.946	68%	0.696	0.146
Applying problem solving strategies across a range of areas	0.948	64%	0.800	0.142
Meaningful contribution to problem-solving	0.938	72%	0.846	0.15
Focus on problem solutions	0.947	57%	0.757	0.134
Ability to confront people problems to resolve conflicts in a constructive manner	0.946	49%	0.824	0.123
Solving problems in teams	0.929	62%	0.787	0.139
Considers problems from all new perspectives	0.945	67%	0.818	0.145
Resilience	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Can manage continuous change	0.911	49%	0.697	0.197
Maintains objectivity when one's own positions or opinions are challenged by peers or stakeholders.	0.839	67%	0.821	0.233
Remains objective when facing criticism	0.831	70%	0.839	0.238
Resilience to negative feedback.	0.878	31%	0.552	0.156
In a positive manner handle rejection on a personal level	0.898	47%	0.683	0.193
Not expecting to be promoted in a short time	0.903	27%	0.522	0.148
Capacity to deal with competing work demands/challenges	0.888	62%	0.789	0.224

	Self-Development	KMO	Communalities	CF Loading Coefficient	Component Score Coef
	Seek ways to improve own knowledge and skills	0.94	61%	0.779	0.114
	Defines ambitious, but realistic, personal goals.	0.942	24%	0.493	0.072
	Managing own learning	0.950	39%	0.62	0.091
	Keep up to date on technical knowledge and new developments.	0.941	35%	0.595	0.087
	Reflecting on and learning from own actions.	0.93	53%	0.726	0.106
	Being willing to learn new skills	0.938	58%	0.763	0.111
	Takes advantage of learning opportunities provided	0.937	58%	0.762	0.111
	Learn from peers	0.949	58%	0.759	0.111
	Having enthusiasm for ongoing learning	0.945	66%	0.812	0.119
	Being willing to learn in any setting - on and off the job	0.932	61%	0.784	0.115
	Prioritise self-development to enhance competencies, knowledge and skills	0.964	61%	0.781	0.114
	Be willing to continuously learn	0.953	65%	0.805	0.118
	Learn from own and others' mistakes	0.926	46%	0.677	0.099
	Ensure Zero Harm	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
	Comply with all Environmental policies and legislation	0.887	68%	0.759	0.229
	Anticipating problems before they happen.	0.923	68%	0.622	0.187
	Take care of your personal safety	0.88	67%	0.772	0.232
	Drive safety consciousness in workplace.	0.846	73%	0.832	0.251
	Take care of own health	0.898	43%	0.627	0.189
	Take care of others' safety	0.837	69%	0.817	0.246
GOVERNANCE COMPLIANCE	**Ethical conduct**	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
	Personal integrity	0.827	66%	0.746	0.256
	Raises compliance, ethical or other issues to protect the Organisation's reputation	0.865	34%	0.587	0.202
	Honesty in actions	0.85	46%	0.675	0.232
	Reporting dishonesty of others	0.877	38%	0.614	0.211
	Uphold the ethics and values of the company and workplace.	0.825	56%	0.750	0.258
	Deal with people, problems and situations with honesty, integrity and personal ethics	0.830	61%	0.778	0.268
	Compliance with Rules	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
	Promotes and encourages others to keep up-to-date with the Organisation's rules, structures, decision-making bodies,	0.839	53%	0.731	0.269
	To hear, understand and follow directions.	0.863	44%	0.665	0.244
	Knows and respects the Organisation's Code of Conduct and values.	0.776	60%	0.774	0.285
	Punctual work attendance	0.836	47%	0.682	0.251
	Comply with policies, directives and procedures	0.766	67%	0.820	0.302

SELF-MANAGEMENT					
	Self-Awareness	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
	Aware of impact of own actions	0.856	66%	0.815	0.262
	Understands the reason behind, or motivation for own actions.	0.873	34%	0.774	0.249
	Self-Motivation	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
	Show interest, motivation, and effort	0.810	38%	0.835	0.268
	Personal energy	0.611	46%	0.658	0.211
	Self-motivation to stay focused and committed to a task	0.611	56%	0.848	0.272
	Responsible behaviours	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
	Accept responsibility for own decisions and actions	0.823	57%	0.756	0.235
	Practice responsible behaviour.	0.814	54%	0.736	0.229
	Be socially responsible and contribute to community	0.842	40%	0.632	0.197
	Accept the consequences of own behaviour and actions	0.888	45%	0.67	0.208
	Set goals and priorities that will balance work and personal life	0.826	43%	0.653	0.203
	Take the credit or blame for the results of own work	0.858	52%	0.724	0.225
	Drug free	0.826	30%	0.550	0.171
	Self-Believe	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
	Ability to confidently express views or needs without either aggression/ dominance / undue submissiveness towards others	0.886	62%	0.787	0.212
	Make a favourable first impression	0.888	50%	0.705	0.19
	Belief in own ability to succeed in a particular situation	0.894	60%	0.777	0.21
	Consistently clean, tidy and appropriately dressed, with a polite and professional manner	0.879	53%	0.725	0.196
	A positive orientation toward own worth or value	0.904	45%	0.674	0.182
	Be confident	0.890	52%	0.724	0.195
	Being assertive	0.900	48%	0.694	0.187
	Manage Emotions	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
	Demonstrate a positive attitude	0.833	99%	0.501	0.122
	Ability to control own emotions and behaviour, particularly in difficult situations or under stress	0.892	100%	0.638	0.155
	Expresses own opinion while remaining factual and respectful.	0.914	100%	0.65	0.158
	Ability to read body language and emotions of others and direct own behaviour appropriately	0.916	99%	0.675	0.164
	Ability to separate emotions from situations	0.867	100%	0.767	0.186
	The ability to balance and defuse inner tensions and stressors	0.866	100%	0.716	0.174
	Being courteous and respectful	0.911	100%	0.695	0.169
	Checks own understanding of others' communication before responding	0.875	99%	0.728	0.177
	Expresses negative feelings constructively	0.872	99%	0.684	0.166
	Avoid jumping to premature conclusions	0.897	45%	0.673	0.182
	To confront difficult issues in an objective and non-emotional manner	0.881	69%	0.831	0.224
	To understand a given situation and to act appropriately	0.902	60%	0.777	0.21
	Accept and provide feedback in a constructive and considerate manner	0.880	66%	0.814	0.22
	Manage own emotions	0.896	59%	0.771	0.208
	Ability to act objectively	0.868	70%	0.839	0.226

TEAM PARTICIPATION

Team Contribution	KMO	Communalities	CF Loading Coefficient	Component Score Coef
Work independently or as a team player	0.919	57%	0.754	0.151
Be accountable for own actions and the actions of group	0.921	55%	0.740	0.148
Cooperative and supportive when working in a team	0.949	41%	0.642	0.128
Ability to support the weak team members	0.899	48%	0.691	0.138
Invites and builds upon the ideas of others.	0.920	56%	0.746	0.149
Initiates collaboration with others and spontaneously assists others in the delivery of their work.	0.936	64%	0.797	0.16
Makes a positive contribution in team	0.908	61%	0.783	0.157
Assumes additional responsibilities to facilitate the achievement of team goals	0.92	62%	0.788	0.158
Willingness to take on more responsibility	0.941	33%	0.573	0.115
Dependable	0.956	23%	0.484	0.097
Gain support from others for recommendations and ideas	0.937	42%	0.640	0.1
Can motivate others toward action.	0.947	75%	0.860	0.137
Organise and motivate people to get things done.	0.944	68%	0.820	0.139
Team negotiation skills	0.939	69%	0.810	0.129
Listens to differing points of view and promotes mutual understanding	0.954	48%	0.670	0.099
Team facilitation skills	0.937	63%	0.780	0.126
Encourages people with opposing viewpoints to express their concerns.	0.949	46%	0.680	0.124
Resolves conflict among team members sensitively and fairly.	0.943	67%	0.820	0.142
Ability to lead others	0.933	70%	0.820	0.13
The ability to motivate others	0.928	69%	0.830	0.142
Negotiating responsively	0.358	98%	-0.080	-0.125
Diversity Management	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Respect for others	0.938	49%	0.698	0.119
Understands and recognises the value of other points of view and ways of doing things.	0.922	64%	0.803	0.137
Have realistic expectation from others that can be met	0.954	43%	0.653	0.112
Working across different ages irrespective of gender, race, religion or political affiliation	0.945	60%	0.775	0.132
Communicate effectively with people from different cultures, backgrounds, and authority levels	0.944	66%	0.810	0.138
Recognise and respect people's diversity, individual differences and perspectives	0.929	71%	0.840	0.143
Be cultural sensitive	0.934	55%	0.744	0.127
Show respect for the views and contributions of other team members	0.942	66%	0.814	0.139
Have realistic expectation from others that can be met	0.916	54%	0.732	0.125
Encourages others to contribute by overcoming cultural barriers and background differences	0.937	58%	0.761	0.13

TEAM PARTICIPATION	Emotional Intelligence	KMO	Communalities	CF Loading Coefficient	Component Score Coef
	Perceive and understand the feelings and attitudes of others (Step in other's shoes)	0.956	61%	0.784	0.113
	Understands others' complex or underlying needs, motivation, emotions or concerns and adjusts communication effectively	0.936	52%	0.721	0.104
	Adapts arguments to others' needs/interests.	0.945	39%	0.623	0.089
	Understands the reason behind, or motivation for someone's actions.	0.934	61%	0.781	0.112
	The ability to be objective in evaluating different situations	0.948	52%	0.719	0.103
	Manage stressful situations	0.941	57%	0.758	0.109
	A caring attitude	0.953	54%	0.732	0.105
	Manage other's emotions	0.946	45%	0.672	0.096
	Empathising	0.945	58%	0.762	0.109
	Willingness to listen to what others are saying	0.951	44%	0.663	0.095
	Be conscious of the feelings and opinions of others	0.950	66%	0.813	0.117
	The ability to listen to many points of view without bias.	0.941	52%	0.718	0.103
	The ability not to judge others	0.951	56%	0.747	0.107
	Social Intelligence	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
	Understand the role of conflict in a group in reaching solutions	0.935	57%	0.757	0.119
	Deal constructively with organisational or team politics	0.915	42%	0.647	0.102
	Work within group dynamics	0.949	65%	0.805	0.127
	Gain respect from others.	0.946	58%	0.759	0.119
	Fosters trust in teams	0.947	66%	0.812	0.128
	Have a positive and open attitude toward others	0.937	60%	0.773	0.122
	Considers people's concerns and adjusts own behaviour in a helpful manner.	0.911	62%	0.788	0.124
	Ability to interact appropriately with other people, without undue conflict or discomfort	0.959	62%	0.785	0.123
	Recognize the good efforts of self and others	0.958	61%	0.782	0.123
	The ability to form working relationships	0.946	56%	0.747	0.118
	Realistic in expectations of others	0.951	48%	0.693	0.109

PERFORMANCE DRIVE

Customer Care	KMO	Communalities	CF Loading Coefficient	Component Score Coef
Responds to and anticipates client needs in a timely, professional, helpful and courteous manner	0.932	61%	0.783	0.169
Keeps clients up-to-date on the progress of the service they are receiving and changes that affect them.	0.928	72%	0.847	0.183
Resolving customer concerns to customer satisfaction	0.935	67%	0.820	0.177
Prioritises client issues and address them accordingly.	0.921	71%	0.844	0.182
Follows-up with clients during and after the delivery of services to ensure that their needs have been met	0.933	64%	0.801	0.173
Clearly shows clients that their perspectives are valued	0.931	67%	0.821	0.177
Strives to consistently meet service standards.	0.939	60%	0.772	0.167
Planning	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Set realistic goals	0.92	39%	0.627	0.131
Develop a plan, revise, adjust, implement	0.919	63%	0.793	0.166
Set priorities with a proper sense of urgency and importance	0.928	56%	0.751	0.158
Plan and manage time	0.900	28%	0.533	0.112
The ability to identify the resources needed to accomplish a given task.	0.909	44%	0.663	0.139
Manages the work plan, sets timelines and milestones, and involves stakeholders to deliver on time.	0.918	55%	0.743	0.156
Define objectives	0.91	67%	0.821	0.172
Develop plans for specific goals and tasks	0.903	72%	0.848	0.178
Establishing and using networks	0.95	51%	0.717	0.15
Commitment	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Translating ideas into action	0.949	43%	0.654	0.13
Follow up on goals, tasks and assignments to assure successful completion	0.901	57%	0.757	0.151
Drive action to achieve goals	0.881	56%	0.748	0.149
Caring about company success	0.928	51%	0.713	0.142
Manages assignments, delivery process and deadlines	0.891	60%	0.773	0.154
Meet deadlines	0.941	41%	0.644	0.128
Monitor own performance to reach deadlines and milestones	0.910	56%	0.745	0.149
Direct energy towards the completion of a goal	0.921	51%	0.715	0.143
Consult with others when uncertain	0.921	33%	0.574	0.115
Personal commitment to execute a given task	0.940	54%	0.733	0.146
Apply-Self	**KMO**	**Communalities**	**CF Loading Coefficient**	**Component Score Coef**
Willingness to work overtime when needed	0.873	41%	0.644	0.156
Tackle demanding goals with enthusiasm	0.878	55%	0.743	0.180
Work on own	0.938	46%	0.682	0.165
Uses compelling argumentation to convey conclusions and ideas.	0.896	55%	0.743	0.18
Taking initiative	0.875	63%	0.793	0.192
Successfully implement knowledge in daily activities	0.877	62%	0.787	0.191
Accept feedback and take responsibility	0.923	58%	0.760	0.184
Have a self-starting attitude in pursuit of goals	0.877	31%	0.560	0.136

APPENDIX L

QUALITATIVE SOFT SKILLS RESPONSES COLLECTED IN THE MIXED METHOD MEASUREMENT INSTRUMENT

Open-ended qualitative soft skill behaviours added by respondents	Question on Scale	Soft skill behaviours as indicated in quantitative Measurement Instrument
Resilience	20	Resilience to negative feedback.
Understand processes	111	Break down processes into its component activities
Add value to organisation	116	Tackle demanding goals with enthusiasm
Understand regulations	166	Comply with policies, directives and procedures
Diverse cultural tolerance	170	Recognize and respect people's diversity, individual differences and perspectives
Endurance	194	Maintains objectivity when one's own positions or opinions are challenged by peers or stakeholders.
Diversity management	251	Encourages others to contribute by overcoming cultural barriers and background differences
Authenticity	49	A positive orientation toward own worth or value
Critical thinking	162	Make decisions that takes into account all aspects and components
Read and extract important aspects	83	Make rational judgment from analysing information and data
Staying positive	1	Demonstrate a positive attitude
Self-starter	4	Have a self-starting attitude in pursuit of goals
See the bigger picture	12	The ability to see the bigger picture.
Cost management	25	Consider cost savings.
Personal accountability	40	Accept responsibility for own decisions and actions
Change management	43	Can manage continuous change
Manage change	43	Can manage continuous change
Value the self	49	A positive orientation toward own worth or value
Perseverance	73	Focus on problem solutions
Apply peer pressure	77	Organise and motivate people to get things done.
Root cause analysis	61	Identify the root cause behind a problem
Communicate clearly	69	Use appropriate vocabulary and grammar when communicating with others

Open-ended qualitative soft skill behaviours added by respondents	Question on Scale	Soft skill behaviours as indicated in quantitative Measurement Instrument
Safety own & others	75	Drive safety consciousness in workplace.
Analytical	83	Make rational judgment from analysing information and data
Respect	90	Respect for others
Open-minded	93	Stays open-minded and encourages others to bring new perspectives.
Look for solutions	94	The ability to see different types of solutions for a given problem
How Business Environmental impact	120	Awareness of how the external environment influence the organisation
Know how job output impact organisation	120	Awareness of how the external environment influence the organisation
Information management	129	Can break information into component parts to see relationships and patterns
Challenge decisions	60	Challenge existing practices in order to become more effective.
Communicate effectively	139	Communicate effectively with people from different cultures, backgrounds, and authority levels
Understand contribution of output to business	172	Is able to explain how own work relates to the goals of the Organisation.
Find ways to reduce harassment and bullying	193	Ability to confront people problems to resolve conflicts in a constructive manner
Understand how organisation works	195	Awareness of how organisation works
Clearly articulate question/query	209	Speaking clearly and directly
Search and find information	213	Collect, analyse and organise information
Not expecting promotion early	219	Not expecting to be promoted in a short time
Report irregularities	3	Raises compliance, ethical or other issues to protect the Reputation and obligations of the organisation.
Negotiations skills	8	Negotiating responsively
Willingness to work	17	Willingness to take on more responsibility
Creativeness	34	Developing creative, innovative solutions
Think outside box	34	Developing creative, innovative solutions
Improve own knowledge and skills	35	Managing own learning
Take self-responsibility	40	Accept responsibility for own decisions and actions
Honesty	51	Honesty in actions

Open-ended qualitative soft skill behaviours added by respondents	Question on Scale	Soft skill behaviours as indicated in quantitative Measurement Instrument
Problem solving	52	Think logical manner when approaching problems or situations
Systems thinking in problem solving	52	Think logical manner when approaching problems or situations
Team work	62	Cooperative and supportive when working in a team
To check on peers	85	Ability to support the weak team members
Willingness to perform tasks to learn	89	Takes advantage of learning opportunities provided
Emotional intelligence	115	Manage other's emotions
Trustworthy	121	Dependable
Service attitude	132	Resolving customer concerns to customer satisfaction
Work individually	135	Work on own
Presentation skills	147	Can present ideas and opinions clearly
Make right decisions to limit impact	148	The ability to evaluate future implications of current decisions and actions.
People management	149	Ability to interact appropriately with other people, without undue conflict or discomfort
Self-management	152	Manage own emotions
Listening	169	Willingness to listen to what others are saying
Deal with people living with disability	170	Recognize and respect people's diversity, individual differences and perspectives
Meet objectives	181	Drive action to achieve goals
Business Acumen	200	Understanding basic business systems and their relationships
Willingness to learn	210	Be willing to continuously learn
Strategy Planning	214	Develop plans for specific goals and tasks
Leading	233	Ability to lead others
Make a contribution to society	240	Be socially responsible and contribute to community
Flexible	13	Adapt to requirements that are changing
Manage demeaning environment	20	Resilience to negative feedback.
Work well under pressure	27	Set goals and priorities that will balance work and personal life
Self-discipline	32	Punctual work attendance
Risk management	41	Assess, weigh and manage risk
Not to be intimidated	63	Be confident

Open-ended qualitative soft skill behaviours added by respondents	Question on Scale	Soft skill behaviours as indicated in quantitative Measurement Instrument
Diligent	114	Personal commitment to execute a given task
Use sensitive language	139	Communicate effectively with people from different cultures, backgrounds, and authority levels
Customer orientated	154	Understanding the needs of internal and external customers
Drive own career	163	Prioritise self-development to enhance competencies, knowledge and skills
Self-Development	163	Prioritise self-development to enhance competencies, knowledge and skills
Humble	169	Willingness to listen to what others are saying
integrity	180	Personal integrity
Ethical conduct	192	Uphold the ethics and values of the company and workplace.
Self-awareness	207	Aware of impact of own actions
Re-training	210	Be willing to continuously learn
Quality of output	227	Work to quality standards
Innovative	236	Come up with innovative ideas
Courage	3	Raises compliance, ethical or other issues to protect the Reputation and obligations of the organisation.
Inter dependant	24	Consult with others when uncertain
Planning and executing	127	Manages the work plan, sets timelines and milestones, and involves stakeholders to deliver on time.
Hardworking	181	Drive action to achieve goals
Conflict management	193	Ability to confront people problems to resolve conflicts in a constructive manner
Gratitude	205	Recognize the good efforts of self and others
Pride in work output	227	Work to quality standards
Deal with competing work demands	232	Capacity to deal with competing work demands/challenges
Decision-making under pressure	232	Capacity to deal with competing work demands/challenges
Work with high volumes of data	232	Capacity to deal with competing work demands/challenges
Listen and Follow instructions	110	To hear, understand and follow directions.