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Extending the four-stage brand loyalty framework in African Telecoms

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Abstract

This paper aims at extending sequential loyalty model by proposing and empirically validating simultaneous and formative re-conceptualizations of the four-stage brand loyalty model within the telecommunication industry in an emerging economy context. The proposed models were tested using data collected from a cross-section of 227 subscribers of four leading multi-national mobile networks in Ghana. A response rate of 67.1% was obtained for data analysis using Partial Least Square (PLS) Structural Equation Modeling (SEM). The findings indicate that while consumer loyalty follows a sequential order, from cognitive to affective to conative to behavioural loyalty dimensions, the alternative simultaneous loyalty model and implicit-explicit model appears to better capture the complexity of consumer behaviour, and predicts behavioural loyalty ($R^2 = 0.60$) better than the sequential model ($R^2 = 0.45$). The findings further demonstrate that the proposed formative specification of loyalty could explain loyalty in telecommunications context better than the sequential loyalty model does. Theoretical and managerial implications are discussed. The paper

advances our knowledge on consumer loyalty in telecommunication service contexts

Keywords: consumer loyalty, four-stage loyalty model, sequential loyalty model, simultaneous loyalty framework, implicit-explicit loyalty framework, telecommunication service.

1. Introduction

Customer loyalty would seem to be an absolute sine quo non for business seeking to sustainable in a developing economy context. Research has proven that loyalty pays, and therefore, has a strong link to financial performance (Aaker, 1991; Kotler and Keller, 2006; Moisescu and Allen, 2010). Customer loyalty to firms has been found to be financially rewarding and strategically effective for achieving long-term relationships with customers (Moisescu and Allen, 2010).

In view of the enormous advantages and consequence of achieving customer loyalty, researchers and practitioners have focused attention on different dimensions of customer loyalty such as its nature, antecedents and moderators. Researchers have attempted to provide theoretical and empirical conceptualisations of loyalty in order to help understand the key constituents of the construct. In this regard, previous studies have proposed different types of loyalty. These range from behaviourally forced-to-be-loyal customers, loyalty due to inertia, functional value-induced loyalty (Kuusik, 2007), committed or emotionally loyal customers, ambivalent or dubious customers, disloyal reducers to leavers (Kuusik, 2007).

Aside the types of loyal customers, previous studies have attempted to provide theoretical models for the nature of loyalty. These theoretical frameworks have emphasized different dimensions of the nature of loyalty construct. Whiles some earlier studies (Day, 1969; Dick and Basu, 1994) considered only one or two facets of the construct. Other researchers (Oliver 1999; Worthington *et al.,* 2009) have emphasised the complexity and multidimensionality of loyalty, from a tri-dimensional model of brand loyalty to four-dimensional loyalty (Oliver, 1999). Among the perspectives on the nature of loyalty dimensions, the four-stage loyalty framework of Oliver (1999) has gained considerable acceptance and application in the marketing literature. It has been applied and verified in different research context (Back and Parks, 2003; Blut *et al.,* 2007; Evanschitzky and Wunderlich, 2006; Han *et al.,* 2011).

We propose to extend a research investigation of this model to the telecommunication industry. This is important since this service context could have a great impact on consumer perception and experience of loyalty. Additionally, in Africa, and especially in Ghana, the telecommunications industry is one of the fastest growing and, therefore, in order to further our understanding of consumer brand loyalty in the telecommunication context, this study is of paramount importance. Apart from the limited application of the four-stage sequential loyalty model (SQLM), previous conceptualizations of the four-stage SQLM has not examined the loyalty formation process through formative specification of loyalty, even though the model argues that behavioural loyalty is formed sequentially from cognitive, affective and conative loyalty stages. Cognitive, affective and conative stages of loyalty are essentially related to consumer internal mental process, making it implicit, while behavioural loyalty is more externally displayed actions of loyalty, making it explicit. Little research, as far as we know, has attempted to examine the formative specification of the cognitive, affective and conative of loyalty as implicit loyalty and how it predicts behavioural loyalty. Furthermore, previous studies have focused on the sequential relationships among the four-stage loyalty framework, not simultaneous interrelationship among these variables.

To date little research, has examined the simultaneous influence of cognitive and affective loyalty on consumer behaviour intentions and action loyalty, though there is evidence from the psychology and marketing literature that, affect and cognition could influence conative loyalty (behavioural intentions) and action or actual loyalty behaviour simultaneously (Ajzen and Fishbein 2000; Back and Parks, 2003; Allen *et al.,* 1992; Mano and Oliver, 1993; Westbrook, 1987). Therefore, this present study examines the simultaneous influence of cognitive and affective loyalty on conative loyalty and behavioural loyalty. Researching these three important issues will provide empirical evidence to enhance our understanding of such questions as:

1. To what extent is the structural, four-stage SQLM is applicable to telecommunication industry subscribers in developing country context?
2. Do affective and conative dimensions of loyalty indicate a deeper (or stronger) level of loyalty than cognitive in the SQLM?
3. Do cognitive and affective loyalty dimensions simultaneously affect conative loyalty?

4. Does the model of formative specification of implicit loyalty dimensions, and their interrelationships better predict explicit behavioural loyalty than the SQLM?

This paper is organized as follows: the introducing aspects shed light on the customer loyalty framework and the research questions that guide the study. The second part focuses on the theoretical background of the study, the third on the study hypotheses, the fourth on analysis of results for the proposed models, fifth on theoretical and managerial implications of the findings, and finally on the limitations and conclusion.

2. Theoretical Background: The Four-Stage Loyalty Model (SQLM)

Among the many conceptualizations of consumer brand loyalty, Oliver's (1999) four-stage of loyalty framework has been widely adopted in many research contexts (e.g., Back and Parks, 2003; Blut *et al.,* 2007; Evanschitzky and Wunderlich, 2006; Han *et al.,* 2011). Oliver's (1999) loyalty model lends support to the application of the sequential learning theory to the study of brand loyalty (Knouse, 1986). According to Oliver (1999) customer loyalty is "a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same-brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour" (Oliver 1999, p. 34). He explains that loyalty consists of attitudinal and behavioural dimensions, in which attitudinal dimension has three main stages; cognitive, affective and conative loyalty. Oliver's (1999) brand loyalty framework presents a structure of attitudes that include intentions, cognition and emotion. The model postulates that consumers first become cognitively loyal, proceed to become affectively loyal, then they become conatively loyal, and finally they exhibit loyalty behaviour described as action or behavioural loyalty. Oliver (1999) argues that consumer loyalty is formed in a progressive manner and in identifiable sequential stages in the order of cognitive loyalty, affective loyalty, conative loyalty, and action (behavioural) loyalty. This implies that consumer loyalty behaviour starts as attitudinal loyalty, which later leads to behavioural loyalty. The various loyalty phases are described in detail.

Cognitive loyalty: According to Oliver's (1999), in the first loyalty stage, consumers develop value expectations and preference for one brand

relative to other available alternatives. This stage is referred to as cognitive loyalty, or loyalty based on brand image. The consumer makes judgement of how well a brand meets their expectations based on their current experiences-based information about the brand. At this stage, loyalty to the brand is based merely on this information. According to Oliver (1999), consumer loyalty to a brand at this stage appears to be superficial in nature and such experience-based information is routine and doesn't stimulate satisfaction. Thus, the degree of loyalty is consumer's judgement about towards brand performance. The consumer's consistent cognitive assessment of his or her satisfaction at this stage gradually becomes a part of his or her experience and begins to take on emotional or affective meanings (Oliver, 1999).

Affective loyalty: At this second stage, the consumers begins to develop a liking or attitude towards the brand based on an increasingly satisfying experience with the brand. This is described as emotional loyalty. Thus, cognitive loyalty develops into a consumer's commitment to the brand emotionally. Whereas cognition can directly be influenced by new information, affect cannot be changed easily. This brand loyalty exhibited is based on consumer liking for a brand, which can be subjected to switching, as some previous research found that large percentages of brand defectors claim to have been previously satisfied with their brand (Reichheld *et al.,* 2000). Therefore, affective loyalty may not be a lasting phenomenon, and therefore a deeper level of loyalty is expected.

Conative loyalty: This the third stage of loyalty development, which is confined to consumer's behavioural intention. Behavioural intentions are affected by repeated events of positive emotions toward the brand. Conation describes the consumer's commitment or plan to repurchase a specific brand in the near future. Accordingly, at the conative loyalty development, the consumer has deeply held commitment to buy the brand. However, this intention to repurchase the brand may not always lead to actual purchase and other loyalty behaviours, however good the intentions may be (Oliver, 1999).

Action loyalty: This is the stage in Oliver (1999) brand loyalty framework. The action phase is where the desire and intention in the previous loyalty state has translated into realistic loyalty actions or behaviour. According to Oliver (1999), at his stage, the consumer is not only ready to act but also ready to overcome any possible obstacles that might prevent him or

her from obtaining the product or service in order to use the preferred brand. This stage of preparedness and determination eventually facilitates repurchase and other loyalty behaviour.

In summary, cognitive loyalty emphases on the brand's perceived characteristics, affective loyalty is toward the brand's likeability, conative loyalty is experienced when the consumer has an intension to re-buy the brand, and action loyalty is a deep commitment to the action of repurchasing (Oliver, 1999). In other words, customers' first become cognitively loyal, then affectively loyal with emotional fulfillment and satisfactory experiences, thirdly conatively loyal with a deeply held commitment and intention to buy, and finally action loyal, overcoming obstacles to achieve the action (Back and Parks, 2003; Evanschitzky and Wunderlich, 2006; Oliver, 1997; 1999). Oliver's (1999) loyalty framework has attracted a lot of attention and application in the marketing and consumer behaviour literature, and have been applied and validated in many service contexts (e.g., Back and Parks, 2003; Blut *et al.,* 2007; Evanschitzky and Wunderlich, 2006; Han *et al.,* 2011; Harris and Mark, 2004). In spite of the wide application of the four-stage SQLM, very little attention has been devoted to limitations of the model and how it could be improved to advance our understanding of brand loyalty in the marketing literature.

2.1 Limitation of the Four-Stage SQLM

One major limitation of the SQLM as proposed by Oliver's (1999) loyalty framework is that it is too restrictive as it portrays a sequentially linear nature of the loyalty formation process and does not realistically portray the complexity of consumer loyalty behaviour in many service contexts. In this regard Oliver (1999) believes that the different phases of loyalty emerge consecutively rather than simultaneously (Evanschitzky and Wunderlich, 2006; Oliver, 1997; 1999). This forms the basis of our criticism and theoretical extension. It is our contention that the relationship between the four loyalty stages could be more of interdependence and simultaneous than has been portrayed in the sequential model of consumer brand loyalty. Human behaviour is complex and may not always follow a sequential order. It has been a long-standing debate as to whether, in human behaviour, cognitive attitudes necessarily precede affective emotions. The interplay between affect and cognition processes in inducing behavioural intentions and actual behaviour has long been established in the psychology and

marketing literature (e.g., Ajzen and Fishbein 2000; 2005; Back and Parks, 2003; Chang and Chieng, 2006; Machleit and Klein, 1992; Mano and Oliver, 1993; Shiv and Fedorikhin, 1999). In fact, Shiv and Fedorikhin (1999) noted that, "the characterization of the consumer in previous decision-making research as a 'thinking machine', driven purely by cognitions, is a poor reflection of reality" (p. 290). On the complexity of consumer decision making, notably, Hansen (2005) through two experimental designs found that, consumers do not use their cognitive and affective skills independently, rather they affect each other.

Moreover, the author found that the cognitive, evaluative constructs of quality and attitude had significant direct effects on buying intention in both experiments. Thus, previous studies have proposed that consumer researchers should take into account that consumer decision-making can often be characterized as an interplay between cognition and affect. Based on these findings, it is our contention that cognitive and affective loyalty dimensions could simultaneously affect conative loyalty (behavioural intentions) and action loyalty.

In view of this, although we agree that affective loyalty could lead to conative loyalty, we also believe that cognitive loyalty could also lead to conative loyalty and action loyalty directly. This is because both conative and action loyalty could be influenced by, not only consumer affective loyalty, but also by consumers' cognitive loyalty.

2.2 Study Hypotheses

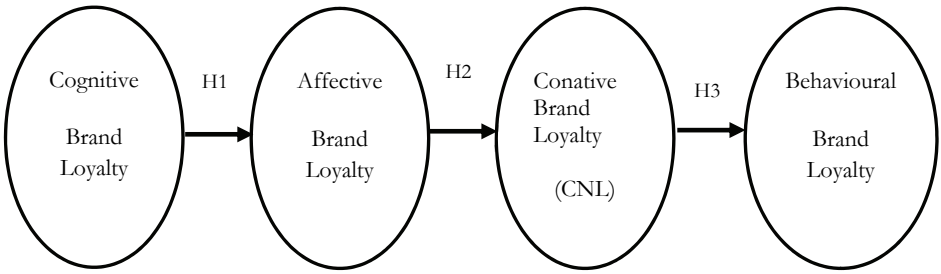
The influence of consumer emotional satisfaction and other emotional loyalty inducements have long been established to be a significant driver of conative loyalty or consumer behavioural intentions (Morris *et al.,* 2002), and loyalty behaviour (Machleit and Klein, 1992; Mano and Oliver, 1993; Oliver, 1993; Westbrook, 1987). The important role that emotions play in consumers' lives suggests that emotions can explain actual behaviour in situations where other constructs, such as attitude, do not account for all or even a significant portion of the variability in behaviour. In this regard, previous studies have found that customers from different service industries (healthcare, automotive service, and hairstylists) that have strong emotional attachments indicate their willingness to continue their relationship with the firm (Shemwell *et al.,* 1994), which represents conative loyalty. Moreover, it has been established that affective loyalty leads customers to purchase additional products and spend more money with the company (Kotler and Keller,

2006; Wong, 2004), are willing to purchase exclusively from that particular service provider (Butz and Goodstein, 1996; Kandampully, 1998), leading to behavioural loyalty.

From the above discussion, it is our contention that consumer cognitive and affective loyalty dimensions could, not only sequentially affect the other higher loyalty dimensions, but also have direct effect on the conative and action loyalty *simultaneously*. Logically, consumers who have developed a positive commitment or attitude towards a product (cognitive loyalty) or affection for a product (affective loyalty) are also likely, not only to have the intention to re-patronize a service (conative loyalty), but also demonstrate genuine acts of loyalty (e.g., repeated purchase) to the service provider (action loyalty). Therefore, we hope to examine these interrelationships as a means of modifying the existing four-stage SQLM to include other significant relationships within the four dimensions of loyalty. We believe that this modified loyalty framework (see Figure 2), referred to as simultaneous loyalty model (SMLM), should predict consumer action loyalty better than the existing structural, SQLM (see Figure 1). Therefore, the following hypotheses are proposed:

H_1: Cognitive brand loyalty will have significantly positive effect on affective brand loyalty
H_2: Affective brand loyalty will have significantly positive effect on conative brand loyalty
H_3: Conative brand loyalty will have significantly positive effect on action brand loyalty
H_4: Cognitive brand loyalty will have significantly positive effect on conative brand loyalty
H_5: Cognitive brand loyalty will have significantly positive effect on action brand loyalty
H_6: Affective brand loyalty will have significantly positive effect on action brand loyalty

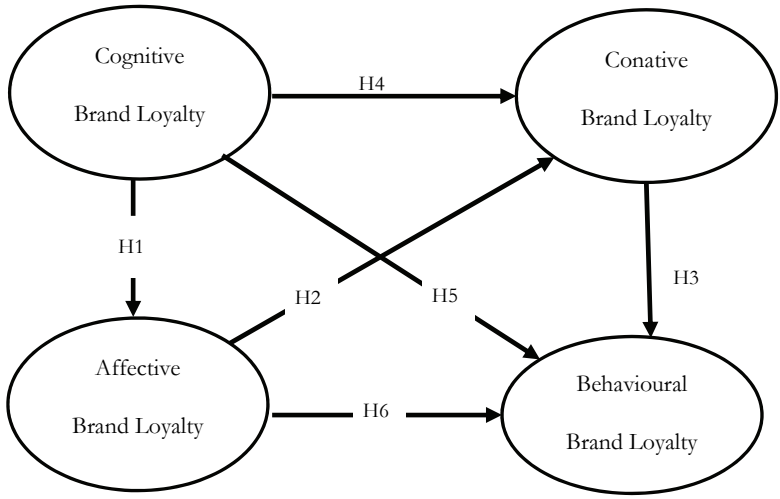
Figure 1 Four-Stage Sequential Loyalty Model (Model 1)



2.3 Implicit and Explicit Loyalty: Towards a Formative Specification of Loyalty

Drawing from empirical studies supporting SMLM (Figure 2), we further and finally propose that implicit-explicit loyalty model (IELM) presented in Figure 3 (model 3) would better predict brand consumer loyalty than the sequential four-stage loyalty model does. Drawing from the cognitive theory of implicit and explicit attitude and knowledge (dimensions (e.g., Dijksterhuis and Nordgren, 2006; Greenwald et al., 2002), existing research conceptualises implicit and explicit loyalty behavior as two major sub-dimensions of the four-stage loyalty model (Yeboah-Asiamah *et al,* 2016). The implicit-explicit loyalty model pre-supposes that consumer explicit loyalty is predicted by the combined effects of implicit loyalty dimensions (i.e., cognitive, affective and conative). This model based on a formative specification of consumer loyalty dimensions, which is drawn from an understanding of the different internal and external psychological process involved in consumer's behaviour (Yeboah-Asiamah *et al,* 2016).

Figure 2. Simultaneous Four-Stage Loyalty (Model 2)



Construct specification of many marketing constructs in numerous empirical studies has come under scrutiny in recent times and there have been calls from scholars for researchers to pay careful attention to the correct specification of research constructs in order to avoid construct misspecification, which has a far reaching negative consequences on the validity of theoretical models (Bollen and Davis, 1994; Diamantopolous and Siquaw, 2006; Edwards and Bagozzi, 2000; Jarvis *et al.,* 2003; Petter *et al.,* 2007). Constructs may be specified reflectively or formatively or both. A construct (see Figure 4) is reflective where the construct gives rise to the indicators and that the indicators reflect the essence of the construct (Jarvis *et al.,* 2003; Petter *et al.,* 2007). A formative construct or index (see Figure 5) is one in which the indicators give rise to the construct and that the indicators together combine to form the constructs (Jarvis *et al.,* 2003; Petter *et al.,* 2007).

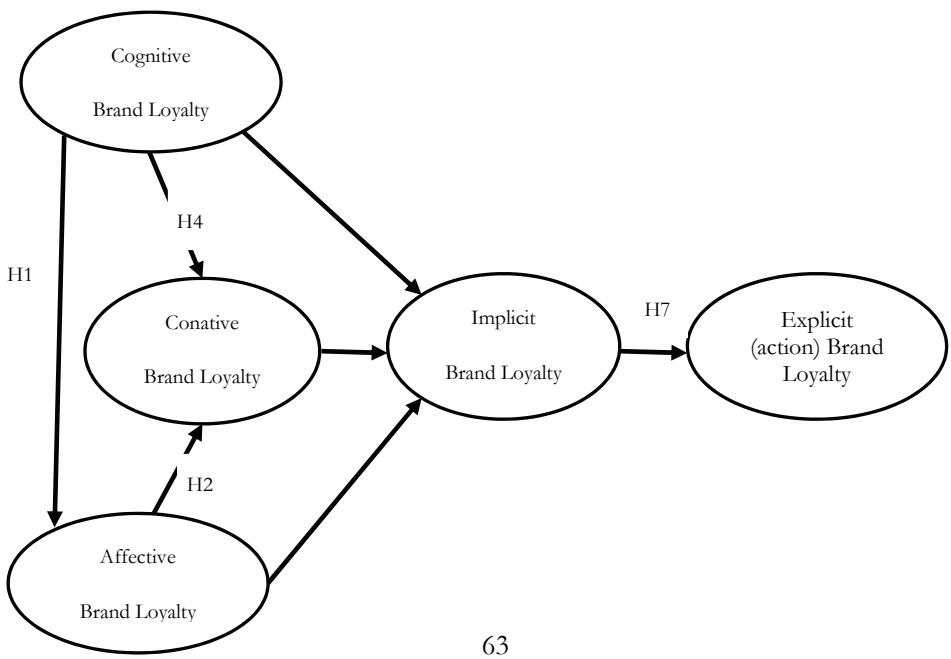
In the light of construct specification, three of the four loyalty stages (Oliver, 1990), which are cognitive, affective and conative are conceptually related more to the internal processes of the consumer decision making, whereas action loyalty conceptually corresponds to the consumer's overt, external behaviour. The three loyalty stages relating to the consumer's internal decision making process could be termed *implicit loyalty*, while action loyalty which is an overt behaviour could be termed *explicit loyalty*. Since action (or explicit) loyalty could be predicted by the

combined effects of cognitive, affective and conative (Back and Parks, 2003; Evanschitzky and Wunderlich, 2006; Han *et al.,* 2011), it follows that implicit loyalty predicts explicit (action) loyalty. Based on these definitions the formation of implicit loyalty is conceptualized as the combined effect of cognitive, affective and conative loyalty dimensions. This implies that implicit brand loyalty could appropriately be conceptualized as a higher, second-order formative construct comprising three sub-dimensions of first-order constructs (Yeboah-Asiamah *et al,* 2016). These first-order constructs have been appropriately specified as reflective in the literature (Blut *et al.,* 2007; Evanschitzky and Wunderlich, 2006; Han *et al.,* 2011). Similarly, previous studies have developed reflective indicators for action (explicit) loyalty (Back and Parks, 2003; Blut *et al.,* 2007; Evanschitzky and Wunderlich, 2006).

It is proposed that formative specification involving cognitive, affective and conative loyalty as sub-dimensions of implicit loyalty could better predict consumer explicit loyalty than the sequential four-stage loyalty model does. Therefore, based on formative specification of implicit loyalty, hypotheses H1, H2 and H4 are implied (Figure 2, Model 2), and we further postulate that:

H_7: Implicit loyalty will have significantly positive effect on explicit loyalty.

Figure 3 Implicit- explicit loyalty model (Model 3)



3. Methodology

3.1 Population and sampling

The population consisted of individual customers (subscribers) of four leading mobile telecommunication service providers in Ghana, namely, MTN Ghana, Vodafone Ghana, Tigo Ghana and Airtel Ghana. In order to collect quality data that reflect customers' opinion and improve representativeness of the sample, a survey method was used to collected data from customers from mobile telecommunication firms in the regional capital, Accra, in January 2013. In all, the researchers obtained 227 valid questionnaires returned. Of the 227 respondents, 58.6% were male and 41.4% were female. Respondents' ages ranged from 18 to 56 years old, and their mean age was 30.86 years old. This implies that majority of them were in the economically active population. While 43.6% of the participants indicated they were salaried employees, unemployed and self-employed reported 26.8% and 27.3% respectively. A majority were prepaid customers, representing 87.2% of the total survey participant. Out of these customer types, 47.1% of the respondent have other network SIM number in addition to the current network they belong to whiles 52.9% have only one network SIM number. In terms of number of years spent with current network, 15.4% have spent below two years. 43.6% have spent between 3-5 years with current service provider whiles 32.1% have also spent between 6-10 years with current service provider. Finally, 47.1% of the respondents were MTN subscribers, 24.2% were Vodafone subscribers, 16.7% Tigo subscribers and 11.9% were Airtel subscribers.

Figure 4 Reflective construct

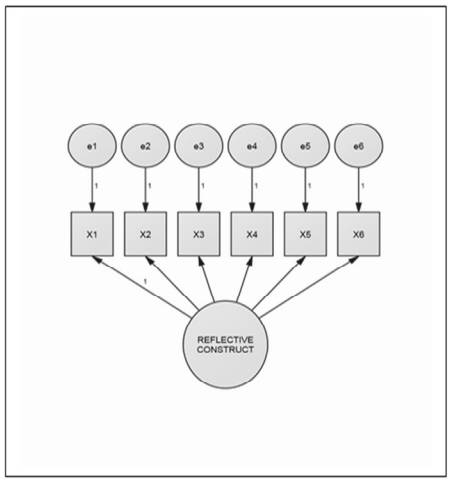
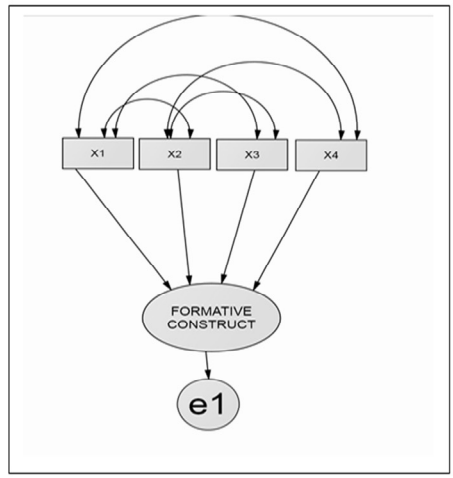


Figure 5 Formative construct



Further analysis of the normality of the data using histogram, normality plots, normality test in AMOS 18.0 indicated that the underlying distribution was significantly normal since the skewness and kurtosis statistics ranged between +/- 1.96 (Razali and Wah, 2011).

3.2 Data collection procedures

The study was a cross-sectional survey in which a self-administered structured questionnaire was used. Since the questionnaire was meant to be used for a larger study, there were several sections on the questionnaire. For the purpose of the present study, there were two main sections, one covered the demography of the respondents and the other covered the measurement items for the four dimensions of customer loyalty. In all, the measurement items for all the constructs were informed by previous research and modified within the context of Ghana's telecommunication industry as illustrated in Table 1. A seven-point Likert scale ranging from 1, "strongly disagree" to 7, "strongly agree" was used. The questionnaire was pre-tested to eliminate any inconsistencies and confirm the suitability of the content, structure and design of the questions. After the pilot test, that the questionnaire was finally administered to subscribers of mobile telecommunication service providers for two weeks.

Table 1: Measurement items for constructs

Construct	Code	Measurement items	No.	Source
Cognitive Brand Loyalty	CGL1	To me, my service provider/network brand would rank first among the other brands	4	Sudhahar et al., (2006)
	CGL2	I would use the services of my network for a long period of time		
	CGL3	The service provider/ network I patronize reflect a lot about who I am		
	CGL4	I will deal exclusively with my service provider/network brand		
Affective Brand Loyalty	AFL1	I feel better when I use the services of my service provider/network	4	Back and Parks (2003)
	AFL2	I love using the services and products of my service provider/network		
	AFL3	I like the performances and services of my network		Sudhahar et al., (2006)
	AFL4	I feel satisfied with my decision to stay with my service provider/network		
Conative Brand Loyalty	CNL1	I have found my service provider brand better than others	4	Sudhahar et al., (2006)
	CNL2	Repeatedly, the performance of my service provider/network brand is superior to that of competitor's one.		
	CNL3	I always found the quality of my network superior to other networks		
	CNL4	I intend to continue patronizing my network services even if the price changes are increased moderately		Back and Parks (2003)
Behavioural Brand Loyalty	BHL1	I will patronize my service provider/network brand again for future needs	4	Sudhahar et al., (2006)
	BHL2	I will try new services that are provided by my service provider		
	BHL3	I will recommend other people to patronize my network brand		
	BHL4	I will say positive things to other people about the services provided by network		

4. Data Analysis

Data was analysed using SPSS version 20.0 and Partial Least Squares (PLS), specifically SmartPLS 2.0 (Ringle *et al.,* 2005) to perform structural equation modelling (SEM) to test the hypothesized relationships among

the constructs in the proposed Models 1, 2 and 3 depicted in Figures 1, 2 and 3 respectively. PLS-SEM was deemed most appropriate because, first, because the predictive power of the two models was a major concern. In this regard, the present study sought to compare the predictive power of two competing models, the sequential and simultaneous models of four-stage loyalty. PLS has been highly recommended for predictive purposes over Covariance-Based SEM (CB-SEM), which is superior in terms of model testing purpose (Chin, 2010; Henseler and Sarstedt, 2012). Secondly, the third model consisted of formative constructs which could be handled easily, in terms of model identification, using PLS compared to CB-SEM that would necessarily require additional indicators or constructs for the purpose of model identification (Chin, 2010). The SmartPLS 2.0 software was set to the following PLS Algorithm setting: Weighting scheme – path weighting scheme; Data metric – mean 0, var 1, Maximum Iterations – 300; Abort Criterion – 1.0E-5; Initial Weights – 1.0; Bootstrapping setting: Sign changes – No sign changes, Cases – 227, 500 bootstrap samples.

Generally, the data analysis followed Anderson and Gerbing's (1988) two-step approach: estimation of the measurement model before the structural model. Specifically, it is presented according to the research questions addressed in this study. Therefore, the following six-step analysis will be taken: (1) Assessment of confirmatory factor analysis (CFA) of the outer model of measurement items, (2) assessment of the hypothesized relationships in the existing SQLM, (3) assessment of the size effect of impact of each constructs in SQLM, (4) assessment of the hypothesized relationships in the competing simultaneous loyalty framework (SMLM), (5) assessment of the hypothesized relationships in the implicit and explicit loyalty framework (Model 3), and (6) a comparison of strength of the three models.

Step 1: Results of measurement model reliability and validity

Construct reliability measures the extent of internal consistency of measures used, and it is assessed through item factor loadings and Cronbach's alpha (Hair *et al.,* 2010), with the acceptable level of 0.50 and 0.70 respectively (Straubs *et al.,* 2004) and also through composite reliability. From Table 2 all item loadings are above 0.50 indicating item reliability. From Table 3, all items have higher Cronbach alpha value, thus, indicating that these multiple measures are highly reliable for the measurement of each construct. Construct validity assesses the degree to

which a measurement represents and logically connects, through the fundamental theory, the observed phenomenon to the construct (Fornell and Larcker, 1981). It is assessed through convergent validity and discriminant validity (Hair *et al.,* 2010).

Convergent validity refers to the extent to which measurement items together explain the construct they intend to represent (Hair *et al.,* 2010; Nimako and Mensah, 2013). The measures of convergent validity include factor loadings (or cross loadings in PLS) that should have minimum loading of 0.5, Cronbach alpha, composite reliability and average variance extracted (AVE) with a minimum of loadings of 0.70, 0.80 and 0.50 respectively (Anderson and Gerbing, 1988; Hair *et al.,* 2010). From Table 2, the factor loadings of items to their respective constructs are all above the recommended 0.50, and in Table 3 the Cronbach alpha reliability values are above their recommended cut off (Fornell and Larcker, 1981), and the composite reliability values for all constructs range from 0.86 to 0.88, exceeding the acceptable requirement of 0.70 (Bagozzi and Yi 1988; Hair *et al.,* 2010). Furthermore, as shown in Table 4, values for the AVE were all greater than the recommended minimum standard of 0.50, ensuring convergent validity. Thus, putting all together, there is evidence in support of the convergent validity of the derived measures

Discriminant validity refers to the extent to which measurement items of a constructs correlates higher with the respective construct more than any other construct in the measurement model. At the item level as show in Table 2, each of the cross loadings of each measurement items loads more on their respective constructs than on other construct, providing evidence of discriminant validity of the items. At the construct level, discriminant validity is considered adequate when the variance shared between a construct and any other constructs in the model is less than the square root of the average variance extracted (AVE) for that construct share with its measures (Fornell and Larcker, 1981). As shown in Table 4, values for the square root of the AVEs are all greater than the recommended minimum standard of 0.50, ensuring discriminant validity as suggested by Fornell and Larcker (1981).

Table 2 Cross Loadings for Item and Convergent Reliability

	Model 1				Model 2			
	AFL	BHL	CGL	CNL	AFL	BHL	CGL	CNL
AFL1	**0.735**	0.471	0.366	0.360	**0.742**	0.473	0.360	0.358
AFL2	**0.860**	0.569	0.539	0.519	**0.857**	0.570	0.536	0.519
AFL3	**0.792**	0.575	0.541	0.454	**0.790**	0.576	0.526	0.450
AFL4	**0.839**	0.553	0.479	0.455	**0.839**	0.553	0.466	0.454
BHL1	0.540	**0.755**	0.588	0.576	0.539	**0.749**	0.582	0.576
BHL2	0.520	**0.803**	0.506	0.500	0.519	**0.807**	0.505	0.500
BHL3	0.568	**0.786**	0.513	0.501	0.568	**0.796**	0.514	0.498
BHL4	0.469	**0.770**	0.477	0.508	0.469	**0.764**	0.478	0.504
CGL1	0.526	0.481	**0.782**	0.558	0.525	0.481	**0.749**	0.556
CGL2	0.538	0.598	**0.849**	0.610	0.537	0.598	**0.837**	0.610
CGL3	0.473	0.583	**0.815**	0.589	0.472	0.582	**0.829**	0.591
CGL4	0.311	0.437	**0.686**	0.607	0.310	0.437	**0.731**	0.614
CNL1	0.360	0.435	0.578	**0.722**	0.360	0.435	0.601	**0.738**
CNL2	0.466	0.601	0.602	**0.838**	0.466	0.598	0.603	**0.834**
CNL3	0.523	0.603	0.631	**0.859**	0.523	0.604	0.633	**0.852**
CNL4	0.417	0.483	0.561	**0.765**	0.415	0.481	0.559	**0.763**

Notes: item loadings are in bold

Table 3 Construct Reliability

		AVE	CR	CA	R^2	Communality	Redundancy
Model 1	AFL	0.653	0.882	0.822	0.365	0.653	0.234
	BHL	0.607	0.861	0.784	0.452	0.607	0.271
	CGL	0.617	0.865	0.795	-	0.617	-
	CNL	0.636	0.875	0.809	0.313	0.636	0.198
Model 2	AFL	0.653	0.882	0.823	0.350	0.653	0.225
	BHL	0.607	0.861	0.784	0.602	0.607	0.222
	CGL	0.621	0.867	0.795	-	0.621	-
	CNL	0.637	0.875	0.809	0.582	0.637	0.104

Note: AVE – Average variance extracted, CR – Composite reliability, CA – Cronbach alpha

Table 4 Latent variable correlations and discriminant validity

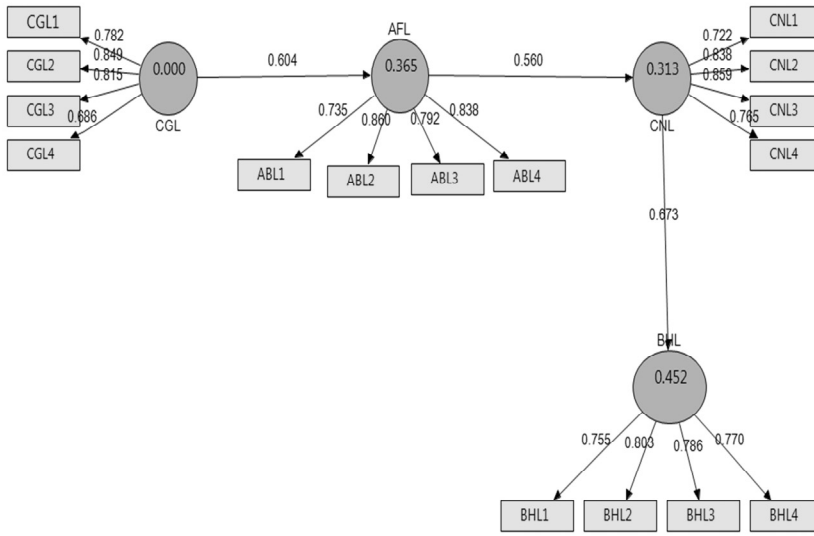
	Model 1					*Model 2*			
	AFL	BHL	CGL	CNL		AFL	BHL	CGL	CNL
AFL	**0.808**				AFL	**0.808**			
BHL	0.674	**0.779**			BHL	0.675	**0.779**		
CGL	0.604	0.672	**0.785**		CGL	0.592	0.670	**0.788**	
CNL	0.560	0.673	0.742	**0.798**	CNL	0.557	0.669	0.750	**0.798**

Notes: AVEs are in the diagonal; correlations are below the diagonal and are significant at 0.01 or 0.05

Steps 2 and 3: Results of SQLM and analysis of size effects

In PLS-SEM, structural models are assessed through regression weights, t-values, significance (p-values) of the t-statistics, as well as effect sizes of independent variables on the dependent variables. For Model 1, the results in Table 5 and Figure 6 show that all the hypotheses were supported by the data for the four-stage sequential loyalty framework. Specifically, it indicates that CGL significantly and positively influences AFL by 60.4% ($\beta = 0.604$, $t = 11.285$, $p < 0.001$), supporting hypothesis H1. Together, CGL explains 36.5% of AFL ($R^2 = 0.365$). Second, AFL significantly and positively affects CNL by 56% ($\beta = 0.560$, $t = 9.027$, $p < 0.001$), and explains 31.3% of CNL ($R^2 = 0.313$), supporting hypothesis H2. Finally, CNL significantly and positively affects BHL by 67.3% ($\beta = 0.673$, $t = 12.161$, $p < 0.001$), and explains 45.2% of BHL ($R^2 = 0.452$), supporting H3. On the effect size for the SQLM, since the model depicts a sequential relationship, the effect sizes of CGL, AFL, CNL as independent variables are assessed by the respective R-squares of their dependent variables. The results (see Table 5) suggest that the strength of CGL on AFL is stronger than the strength of AFL on CNL, but the strength of CNL on BHL appears to be the strongest of the three loyalty relationships.

Figure 6 Assessment of Structural Model 1



Step 4: Results of SMLM and its effect sizes

For Model 2, the results in Table 5 and Figure 7 show that all the hypotheses were supported by the data for the four-stage sequential loyalty framework. Specifically, it indicates that CGL significantly and positively influences AFL by 59.2% (β = 0.592, t = 9.742, p < 0.001), supporting hypothesis H1. Together, CGL explains 35% of AFL (R^2 = 0.350). Second, AFL significantly and positively affects CNL by 17.4% (β = 0.174, t = 2.075, p < 0.05), confirming hypothesis H2. Third, CNL significantly and positively affects BHL by 28.2% (β = 0.282, t = 2.649, p < 0.01), supporting H3. Furthermore, CGL influences CNL significantly by 64.7% (β = 0.0.647, t = 8.186, p < 0.001), supporting H4, and again CGL significantly influences BHL (β = 0.235, t = 2.649, p < 0.001), supporting H5. Together, CGL and AFL predict 58.2% of CNL (R^2 = 0.582), and finally, the four-stage simultaneous loyalty model predicts 60% of BHL (R^2 = 0.60). The effect size of each of the loyalty stages is presented in Table 6. Effect size is estimated by:

$$\frac{R^2\ included - R^2\ exluded}{1 - R^2\ included} \quad (1)$$

Cohen (1988) provides the following guidelines for interpreting effect sizes: Small – 0.02, medium – 0.15, large – 0.35. From Table 6, while cognitive and conative loyalty dimensions have small effect sizes, affective has a medium effect size. This suggests that affective loyalty plays stronger role in behavioural brand loyalty in the research context than the two-attitudinal loyalty dimensions.

Table 5 Results of hypothesis testing for the three models

Model	Hypothesis	Hypothesized Relationship	Regression Weight	Std. Error	T-value	P-value	R^2 (BHL)	Result
Model 1	H1	CGL --> AFL	0.604	0.054	11.285	0.000	0.45	S
SQLM	H2	AFL --> CNL	0.560	0.062	9.027	0.000		S
	H3	CNL --> BHL	0.673	0.055	12.161	0.000		S
Model 2	H1	CGL --> AFL	0.592	0.061	9.749	0.000	0.60	S
SMLM	H2	AFL --> CNL	0.174	0.084	2.075	0.020*		S
	H3	CNL --> BHL	0.282	0.106	2.649	0.004*		S
	H4	CGL --> CNL	0.647	0.079	8.186	0.000		S
	H5	CGL --> BHL	0.235	0.113	2.074	0.020*		S
	H6	AFL --> BHL	0.379	0.090	4.233	0.000		S
Model 3	H1	CGL --> AFL	0.591	0.059	10.053	0.000		S
IELM	H2	AFL --> CNL	0.172	0.032	11.850	0.018*		S
	H4	CGL --> CNL	0.650	0.080	8.091	*		S
	H7	IMLTY -> EXLTY	0.773	0.039	19.983	0.000	0.60	S
		CGL --> IMLTY	0.382	0.024	16.026	0.000		S
		AFL --> IMLTY	0.382	0.034	11.229	0.000		S
		CNL --> IMLTY	0.388	0.023	17.052	0.000		S

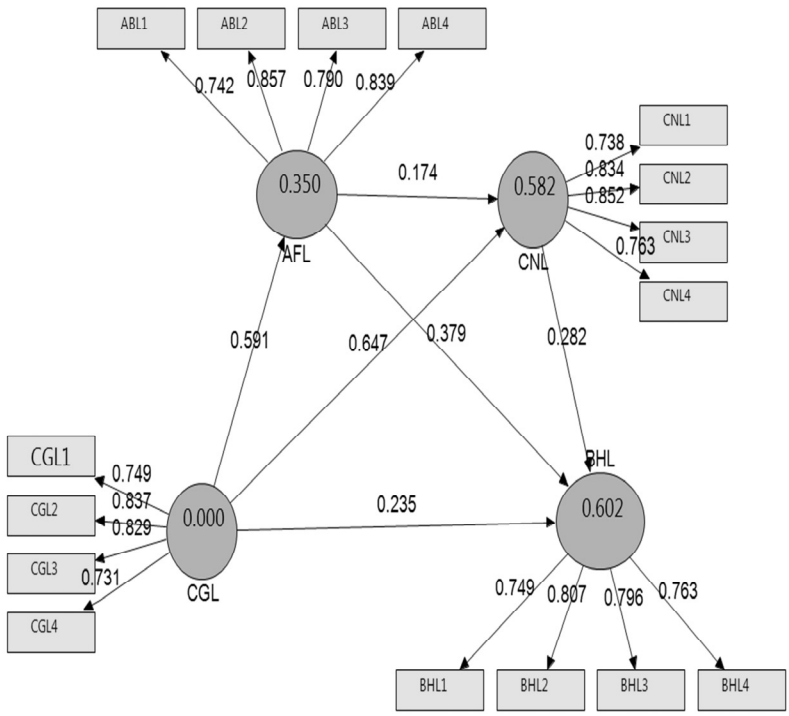
Notes: * significant at 0.01, ** significant at 0.05, S – supported, IMLTY – Implicit loyalty, EXLTY – Explicit loyalty, Model 1 represents sequential loyalty model (SQLM), Model 2 is simultaneous loyalty model (SMLM), Model 3 is implicit-explicit loyalty model (IELM)

Table 6 Effect size analysis for Model 2

Sub-models	(R^2) Excluded	(R^2) Included	f-Squared	Effect size
Model without CGL	0.581	0.602	0.053	Small
Model without AFL	0.512	0.602	0.226	Medium
Model without CNL	0.569	0.602	0.083	Small

Note: effective size 0.02 – small, 0.15 - medium, 0.35 – large.

Figure 7. Assessment of structural model 2



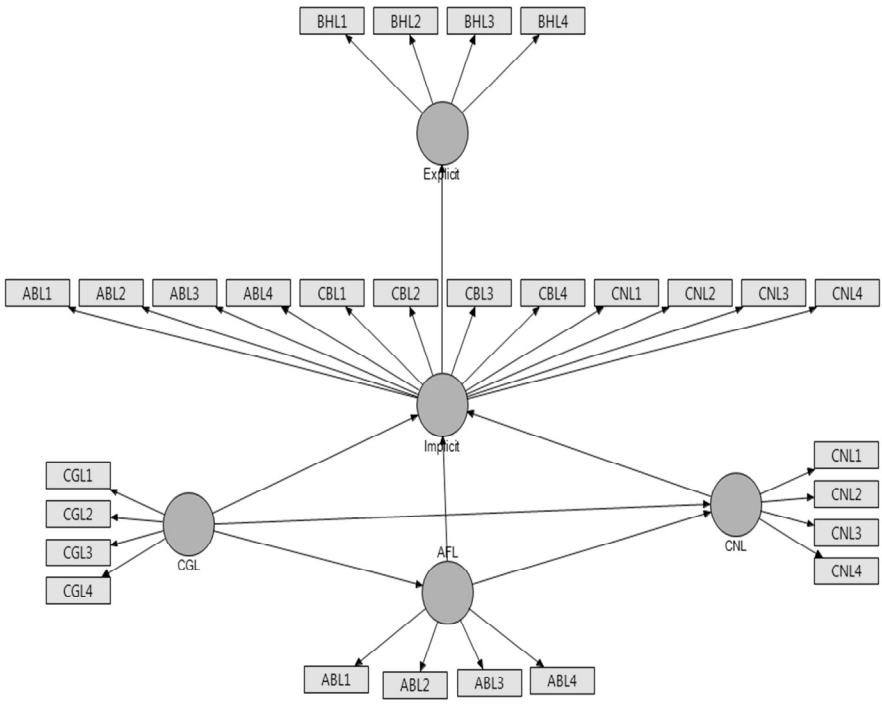
Step 5: Results of structural Model 3 (IELM)

Due to the formative nature of the IELM (model 3), Bagozzi (1994, p. 333) cautions that "reliability in the internal consistency sense and construct validity in terms of convergent and discriminant validity are not meaningful, when indexes are formed as a linear sum of measurements." Thus, construct validity is not required since formative indicators need

not correlate (Bollen, 1989; Diamantopoulos and Winklhofer, 2001). However, regression weights of indicators (in our case sub-dimensions of implicit loyalty) are required to be significant to justify their relevance in the implicit loyalty model and the validity of the formative construct (Diamantopoulos and Winklhofer, 2001). Moreover, external or criterion validity of the formative implicit loyalty construct is required; this is assessed by how the construct is able to predict other nomologically related constructs in a nested model or whole theoretical framework being proposed (Diamantopoulos and Winklhofer, 2001). For this purpose, implicit loyalty is expected to predict explicit (action) loyalty for its criterion validity to be established. Finally, in a formative index model, the independent variables may be conceptually unrelated, but in cases where they are conceptually related as in the case of IELM (model 3 in Figure 3), their structural relationships could be assessed.

In Table 5 and Figure 8, the results show that each of the formative indicators of implicit loyalty has significant contribution to the formation of the construct. Specifically, cognitive loyalty significantly contributes to implicit loyalty by 38.2% ($\beta = 0.382$, $t = 16.026$, $p < 0.001$), similarly, affective loyalty contributes significantly to implicit loyalty by 38.2% ($\beta = 0.382$, $t = 11.229$, $p < 0.001$) and finally conative loyalty contributes significantly by 38.8% to implicit loyalty ($\beta = 0.388$, $t = 17.052$, $p < 0.001$). Furthermore, the results show that implicit loyalty significantly and positively influences explicit loyalty by 77.3% ($\beta = 0.773$, $t = 19.983$, $p > 0.000$) and together the formative model of implicit loyalty and its sub-dimensions predicts about 60% of explicit loyalty ($R^2 = 0.60$).

Figure 8 Assessment of Implicit-explicit loyalty model (IELM, model 3)



Step 6 : Comparison of competing models

In this final analysis, we compare the three models on the basis of their R-squares. From Table 5 the results suggest that simultaneous four-stage loyalty model, SMLM, and the IELM appear to predict consumer behavioural loyalty better than four-stage loyalty framework, Model 1. This is because while Model 1 predicts 45% of the behavioural loyalty (R^2 = 0.45), SMLM and IELM each predict about 60% of behavioural loyalty (R^2 = 0.60).

5. Discussion of findings

The main focus of the present study was to extend the sequential brand loyalty frameworks by testing the simultaneous relationships within the framework and proposing a formative loyalty framework. Based on

objective analysis of the results, the following are the findings of the study. First, the study found that the sequential four-stage loyalty framework is verified as it found that cognitive loyalty affects affective loyalty which in turn affects conative loyalty, which also affects behavioural loyalty, confirming many previous studies (e.g., Back and Parks, 2003; Evanschitzky and Wunderlich, 2006; Han *et al.,* 2011). In relation to our research question one, findings from the SQLM indicate that the model predicts about 45% of behavioural loyalty. For research question two, the analysis of the effect sizes indicate that the effect size of conative loyalty tends to be stronger than cognitive loyalty and affective loyalty suggesting that conative loyalty is a deeper (or stronger) level of loyalty than cognitive and affective loyalty as postulated in the SQLM. However, the analysis further shows that cognitive loyalty has a greater effect on affective loyalty than affective loyalty has on conative loyalty, contradicting what the SQLM posits.

For research question three, findings from the SMLM suggest that both cognitive and affective loyalty simultaneously affect conative loyalty. These new findings contradict existing four-stage SQLM that postulates a sequential, non-simultaneous relationship among the loyalty stages. The significance of these findings is that conative loyalty may not sequentially flow from only affective loyalty but could be directly influenced by cognitive and affective loyalty *simultaneously*. Moreover, the findings show that the SMLM predicts behavioural loyalty better than the SQLM does. This suggests that the complexity of consumer loyalty behaviour might not be fully captured by the four-stage SQLM. The findings suggest that the interplay of consumer cognitive and affective loyalty responses in predicting conative loyalty and behavioural loyalty could be simultaneous and that such a model could better explain consumer behavioural loyalty than its sequential counterpart suggests. For research question four, findings from the IELM (model 3) also suggest that a formative conceptualization of consumer loyalty could help predict behavioural loyalty better than the SQLM does. Thus, the model of formatively specified implicit loyalty processes, namely, cognitive, affective and conative loyalty combine to predict action loyalty better than what the SQLM has postulated so far in the existing literature. This latter conceptualization emphasizes that complexity of consumer behaviour and the combined effects of internal loyalty processes in predicting external, action or behavioural loyalty.

6. Conclusion and Future Research

In conclusion, the paper empirically examines and compares three competing models of consumer loyalty: sequential, simultaneous and implicit-explicit conceptualizations of the consumer loyalty framework. Using empirical data from a cross-sectional survey, the results supports a simultaneous relationship between cognitive and affective loyalty dimension and conative and behavioural loyalty. While the findings suggest that consumer loyalty framework follow a sequential four-stage level, from cognitive to affective to conative to behavioural loyalty dimensions, the alternative SMLM and IELM appear to reflect and capture the realities of consumer loyalty formation and predicts behavioural loyalty better than its SQLM counterpart does. A formative specification of loyalty construct could, therefore, enhance scholars and practitioners understanding of consumer loyalty framework better than the sequential framework of loyalty stages. It is recommended that future research should examine the applicability of the two proposed extensions in the light of different service contexts in other counties in order to verify the generalizability of SMLM and IELM models. Future research should also attempt to examine the influence of service provider's marketing strategies on implicit-explicit loyalty framework to enhance our understanding of the applicability of the model in the broader context of marketing strategy.

7. Implications for Theory and Practice

The present paper makes important theoretical, methodological and practical contributions to marketing literature. Theoretically, the present study extends our understanding of consumer loyalty framework by verifying the simultaneous influence of cognitive and affective loyalty on conative and behavioural loyalty, a void that has existed for a long time in the consumer loyalty literature. The paper also extends the conceptualization of loyalty framework by validating the formatively specified IELM model of consumer loyalty. The IELM confirms that the combined effect of cognitive, affective and conative loyalty dimensions, being implicit loyalty, strongly and positively predicts explicit or behavioural loyalty than its SQLM does.

Methodologically, the paper contributes to our knowledge in the application of PLS-SEM in the Marketing literature. In particular, the paper provides empirical knowledge on the analysis of structural models

involving formative constructs using PLS-SEM approach, which an emerging second generation technique that practicing researchers need to be familiar with. Practically, the findings imply that telecommunications firm managers can influence behavioural brand loyalty by developing integrated loyalty programmes and integrated marketing communication strategies that are capable of influencing and inducing consumer attitudinal and affective loyalty simultaneously, as a means of affecting consumer conative loyalty and eventually achieving behavioural brand loyalty. Moreover, telecommunication management should focus on marketing strategies that are integrative, capable of inducing affective and cognitive loyalty dimensions. This in turn can have a simultaneously positive effect on consumer loyalty intentions and actual loyalty behaviour to the firm.

References

Aaker, D.A. (1991) *Managing brand equity: Capitalizing on the Value of a Brand Name*. The Free Press, New York, NY.

Ajzen, I. and Fishbein, M. (2000) Attitudes and the Attitude Behaviour Relation: Reasoned and Automatic Processes. *European Review of Social Psychology, 11*(1): 1-33.

Ajzen, I. and Fishbein, M. (2005) The Influence of Attitudes on Behaviour*,* in The Handbook of Attitudes, D. Albarracín, B. T. Johnson, and M. P. Zanna (Eds.), Mahwah, NJ: Erlbaum, pp.173-221.

Allen, C.T., Machleit, K.A. and Klein S.S. (1992) A comparison of attitudes and emotions as predictors of behavior at diverse levels of behavioral experience. *Journal of Consumer Research 18* (4): 493-504.

Anderson, J.C. and Gerbing, D.W. (1988) Structural equation modelling in practice: A review and recommended two-step approach. *Psychol. Bull 103* (3): 411-423.

Back, K-J. and Parks, S.C. (2003) A Brand Loyalty Model involving Cognitive, Affective, and Conative Brand Loyalty and Customer Satisfaction. *Journal of Hospitality and Tourism Research, 27* (4): 419–435.

Bagozzi, R.P. (1978) The construct validity of the affective, behavioral, and cognitive components of attitude by analysis of covariance structures. *Multivariate Behavioral Research, 13*: 9-31.

Bagozzi R.P. and Yi, Y. (1988) On the evaluation of structural equation models. *Journal of the Academy of Marketing Science 16*: 74-94.

Blattberg, R.C. Neslin, S.C. (1990) *Sales promotion: Concepts, methods, and strategies*. Englewood Chiffs, NJ: Prentice-Hall.

Blut, M., Evanschitzky H. and Vogel V. (2007) Switching Barriers in the Four-Stage Loyalty Model. *Advances in Consumer Research 34*:726-734.

Bollen, K.A and Davis, W.R. (1994) Causal indicator models: Identification, estimation, and testing. *Paper presented at the American Sociological Association Convention*, Miami.

Breckler, S. (1984) Empirical validation of affect, behavior, and cognition as distinct components of attitude. *Journal of Personality and Social Psychology 47:*1191 1205.

Chandon, P., Wansink, B. and Laurent, G. (2000) A Benefit Congruency Framework of Sales Promotion Effectiveness. *Journal of Marketing 64* (4):65–81.

Chang, P.L. BS Chieng, M-H. (2006) Building consumer–brand relationship: A cross cultural experiential view. *Psychology and Marketing* 23: 927–959. doi: 10.1002/mar.20140

Chin, W. (2010) How to write up and report PLS analyses. In: EspositoVinzi V, Chin W.W, Henseler J, Wang H (Eds.) Handbook of partial least squares: concepts, methods and applications. *Springer Heidelberg*: 655 – 690.

Day, G.S. (1969) A Two-Dimensional Concept of Brand Loyalty. *Journal of Advertising Research 9:* 29-35.

Diamantopoulos, A. and Siguaw, J.A. (2006) Formative versus reflective indicators in organizational measure development: a comparison and empirical illustration. *British Journal of Management* 17 (4): 263-282.

Dick, A.S. and Basu, K. (1994) Customer Loyalty: Toward an Integrated Conceptual Framework. *Journal of the Academy of Marketing Science* 22 (2): 99-113.

Evanschitzky, H. and Maren, W (2006) An Examination of Moderator Variables in the Four Stage Loyalty Model. *Journal of Service Research* 8 (4): 330–345.

Fornell, C. and Larcker, D.F. (1981) Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*: 39-50.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) *Multivariate Data Analysis*. Englewood Cliffs, NJ: Prentice Hall.

Han, H., Kim, Y., and Kim, E-K. (2011) Cognitive, affective, conative, and action loyalty: Testing the impact of inertia. *International Journal of Hospitality Management, 30*(4): 1008-1019.

Hansen, T. (2005) Perspectives on consumer decision-making: an integrated approach. *Journal of Consumer Behaviour 4*: 420–437. Doi: 10.1002/cb.33

Harris, C.L. and Mark, H.G. (2004) The Four Stages of Loyalty and the Pivotal Role of Trust: A Study of Online Service Dynamics. *Journal of Retailing 80* (2): 139–58.

Henseler, J. and Sarstedt, M. (2012) Goodness-of-t indices for partial least squares path modelling. *Comput Stat 28*:565 – 580. DOI 10.1007/s00180012-0317-1

Jacoby, J. and Kyner, D.B. (1973) Brand Loyalty versus Repeat Purchasing Behaviour. *Journal of Marketing Research 10*:1-9.

Jarvis, C.B., Mackenzie, S.B. and Podsakoff, P. (2003) A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research 30*: 1999-1216.

Kotler, P. and Keller, K. (2006) *Marketing Management*, 12th Edition. Pearson Education Inc., New Jersey.

Knouse, SB. (1986) Brand loyalty and sequential learning theory. *Psychology and Marketing 3*: 87–98.

Kuusik, A. (2007) Affecting Customer Loyalty: Do Different Factors have various Influences in Different Loyalty Levels? *The University of Tartu Faculty of Economics and Business Administration Working Pape*r, 58:3-29.

Laroche, M., Pons, F., Zgolli, N., Cervellon, M. and Kim, C. (2003) A Model of Consumer Response to Two Retail Promotion Techniques. *Journal of Business Research, 56*: 513-522.

Lee, J-S. and Back. K-J. (2009) An Examination of Attendee Brand Loyalty: Understanding the Moderator of Behavioural Brand Loyalty. *Journal of Hospitality and Tourism Research, 33*(1): 30–50.

Madichie, N. (2011). A preliminary assessment of Middle East investments in sub-Saharan Africa: Insights from the mobile telecom sector. *Thunderbird International Business Review*, 53(1), 79-92.

Mano, H. and Oliver, R.L. (1993) Assessing the dimensionality and structure of the consumption experience: evaluation, feeling, and satisfaction. *Journal of Consumer Research*, *20*: 451-66.

Moisescu, O.I. and Allen, B. (2010) The Relationship between the Dimensions of Brand Loyalty. An Empirical Investigation of Consumers", Marketing *and Management* 5 (4):83–98.

Nimako, G.S. and Mensah, F.A. (2013) Examining the relationships among antecedents of Guests' Behavioral Intentions in Ghana's Hospitality Industry: A Structural Equation Modelling Approach", *Asian Journal of Business Management* 5 (2): 252-266.

Oliver, R.L. (1997) *Satisfaction: A behavioural perspective on the consumer*. McGraw Hill, Boston: Irwin.

Oliver, R.L. (1999) Whence Consumer Loyalty? *Journal of Marketing* 63:33–44.

Petter, S., Straub, D. and Rai, A. (2007) Specifying Formative Constructs in IS Research. *MIS Quarterly 31* (4): 623 – 656.

Razali, N.M. and Wah, Y.B. (2011) Power comparisons of Shapiro-Wilk, Kolmogorov Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modelling and Analytics,* 2(1): 21-33.

Reichheld, F.R. and Schefter, P. (2000) E-loyalty: Your Secret Weapon on the Web. *Harvard Business Review, 78* (4): 105-14.

Ringle, C.M., Wende, S. and Will, S. (2005) SmartPLS 2.0 (M3) Beta. *Hamburg*. http://www.smartpls.de.

Shemwell, D.J., Cronin, J.J. and Bullard W.R. (1994) Relational exchange in services: An empirical investigation of on-going customer-service provider relationships. *International Journal of Service Industry Management 5*: 57-68.

Shiv, B. and Fedorikhin, A. (1999) Heart and mind in conflict: The interplay of affect and cognition in consumer decision-making. *Journal of Consumer Research*, 26, (3): 278-292.

Straub, D., Boudreau, M. and Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information Systems, 13*: 380-427.

Sudhahar, J.C., Israel, D., Britto, A.P. and Selvam, M. (2006) Service Loyalty Measurement Scale: A Reliability Assessment. *American Journal of Applied Sciences, 3*(4):1814-1818.

Westbrook, R.A. (1987) Product/Consumption-Based Affective Responses and Post Purchase Processes. *Journal of Marketing Research 24*: 258-270.

Wong, A. (2004) The role of emotional satisfaction in service encounters. *Managing Service Quality 14* (5): 365 – 376.

Worthington, S., Russell-Bennett, R. and Hartel, C.E.J. (2009) A tridimensional approach for auditing brand loyalty. *Journal of Brand Management 17* (4): 243-253.

Yeboah-Asiamah, E., Nimako, S. G., Quaye, D. M., & Buame, S. (2016). Implicit and explicit loyalty: the role of satisfaction, trust and brand image in mobile telecommunication industry. *International Journal of Business and Emerging Markets*, 8(1), 94-115.