Transformative Mixed Methods: Addressing Inequities

Donna M. Mertens

Abstract
Researchers committed to furthering social justice face many challenges in aligning their values with their research approaches. The transformative paradigm provides a philosophical framework that focuses on ethics in terms of cultural responsiveness, recognizing those dimensions of diversity that are associated with power differences, building trusting relationships, and developing mixed methods that are conducive to social change. Examples of transformative cyclical mixed methods designs are used to illustrate the methodological implications of this paradigm.

Keywords
mixed methods, paradigm, transformative

On most days when I wake up, I drink a cup of coffee and read the Washington Post newspaper. From this privileged position, I read about continuing problems in the world, as well as resourcefulness in the face of what seem to be overwhelming challenges. When I come upon a topic that I want to pursue further, I can search online for previous articles in the newspaper or go to scholarly databases and search for research studies on the topic. I can continue my online search to find relevant extant data, such as economic conditions or rates of HIV/AIDS infection, without leaving the comfort of my home. Also, as a person of privilege, I can travel to places in the United States or other countries to gather both quantitative and qualitative data by means of personal interactions, observations, and interviews.

For example, I was reading an article about the issues in South Africa related to xenophobia. Poor South Africans living in townships attacked refugees from

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surrounding countries because the South Africans believe that the refugees work for lower wages and hence threaten their chances of working for wages sufficient to take care of their families (Roelf, 2009). “At the moment between 1,300 and 2,700 people, mostly Zimbabwean asylum seekers, have set up an internally displaced persons camp site or safety site, at De Doorns sports ground,” said Braam Hanekom, coordinator of People Against Suffering, Suppression, Oppression and Poverty (PASSOP) (in Roelf, 2009). The asylum seekers live in two large tents with limited water, poor security, and an inadequate number of portable toilets.

A little searching brought me to an earlier article published in May 2008 that described

gangs of men armed with guns, clubs and threats . . . [who] chased thousands of Zimbabweans and other foreigners from their homes in this nation’s poor townships over the past week, leaving at least 12 people dead and scores injured, according to news reports. The nighttime rampages have turned police stations in several townships in the Johannesburg area into virtual refugee camps, with makeshift tents, portable toilets and clusters of terrified people, many displaying wounds from the attacks. (Tinberg, 2008)

When I travel to South Africa, I see the poverty in the townships; I see the burgeoning immigrants/refugees who populate the squatter camps outside the townships, as well as those who take over abandoned high rise buildings in downtown Johannesburg—most without electricity, running water, or toilets. I also see signs of resilience: I see a small number of homes that are built out of brick and that have electricity and running water; these are homes built by the government after the end of apartheid. South Africans put their names on a list and wait until a home becomes available. I also see day care centers and early childhood centers that are started by concerned people of privilege in South Africa in the illegal squatter camps. And, I see young girls carrying water from spigots in other parts of the townships to their homes made of iron sheeting, roadside signs, and hoods of cars to wash their family’s clothes. These signs of resilience suggest that there are people who want to improve the quality of their lives, even when they are surrounded by a context that has very little to support their dreams.

When I reflect upon these conditions, I ask myself: What is the researcher’s role with regard to the promotion of social justice? How can researchers address issues of power and inequities as a means to furthering human rights? How can researchers be cognizant of and responsive to the dimensions of diversity that are relevant in such complex contexts as the townships and squatter camps? Or in other complex contexts related to economic development and gender inequalities (Huato & Zeno, 2009), prejudice against Middle Eastern people following 9/11 (Schildkraut, 2009), domestic violence (Collins & Dressler, 2008), Bedouins who are striving for land on which to live in Israel (Abu-Saad, 2008), or colonialism in the educational systems in New Zealand (Kepa & Manu’atu, 2008)?
Transformative Paradigm

The transformative paradigm is a meta-physical framework that “directly engages the complexity encountered by researchers and evaluators in culturally diverse communities when their work is focused on increasing social justice” (Mertens, 2009, p. 10). It focuses on the tensions that arise when unequal power relationships permeate a research context that addresses intransigent social problems (Greene, 2008). For example, the question of power arises in terms of privileges associated with economic status, religious beliefs, immigrant status, race/ethnicity, tribal identity, gender, disability, and status as an indigenous person or a colonizer, to name a few basis on which power differentials have been historically evidenced. The transformative paradigm also focuses on the strengths that reside in communities that experience discrimination and oppression on the basis of their cultural values and experiences (Mertens, 2007, 2009, 2010).

The transformative paradigm is built upon the early work of Guba and Lincoln (2005) that defined a paradigm as being inclusive of four sets of assumptions:

1. Axiology refers to beliefs about the meaning of ethics and moral behavior.
2. Ontology refers to beliefs about the nature of reality.
3. Epistemology refers to the nature of knowledge and the relationship between the knower and that which would be known.
4. Methodology refers to beliefs about the process of systematic inquiry.

The remainder of this article explores the philosophical assumptions of the transformative paradigm and describes examples of mixed methods studies that illustrate this approach.

Axiology

The transformative axiological assumption includes the importance of respecting cultural histories and norms in interactions in order to conduct research that has the potential to increase social justice. Researchers need to be cognizant of the pervasiveness of discrimination and oppression and to understand communities sufficiently to effectively challenge the status quo and provide a basis for social change. Many indigenous groups argue for the need to understand the meaning of their cultures and their views of ethics as providing terms of reference for conducting research in their communities. For example, Native American Indians are reclaiming their rights of self-determination by establishing ethical review boards that are specific to their members (LaFrance & Crazy Bull, 2009). Māori people and Australian Aborigines developed Indigenous Terms of Reference (ITR) that defined principles and procedures that need to be considered when researchers work in their communities (Cram, 2009; Smith, 2008). Harris, Holmes, and Mertens (2009) adapted the ITRs to develop
the Sign Language Community Terms of Reference (SLCTR) for research with Deaf people who use Sign language. The SLCTR includes the following principles:

1. The authority for the construction of meanings and knowledge within the Sign Language community rests with the community’s members.
2. Investigators should acknowledge that Sign Language community members have the right to have those things that they value to be fully considered in all interactions.
3. Investigators should take into account the worldviews of the Sign Language Community in all negotiations or dealings that impact on the community’s members.
4. In the application of Sign Language communities’ terms of reference, investigators should recognize the diverse experiences, understandings, and way of life (in sign language societies) that reflect their contemporary cultures.
5. Investigators should ensure that the views and perceptions of the critical reference group (the sign language group) is reflected in any process of validating and evaluating the extent to which Sign Language communities’ terms of reference have been taken into account.
6. Investigators should negotiate within and among sign language groups to establish appropriate processes to consider and determine the criteria for deciding how to meet cultural imperatives, social needs, and priorities. (p. 115)

The axiological assumption leads the researcher to ask questions such as, What cultural guidelines for research need to be considered in this context? How can I show respect for cultures that have been historically denigrated? How can I incorporate the voices of members of communities that have not traditionally had a seat at the table when decisions about what is ethical or not ethical were made?

Mertens (2009, 2010; Mertens & Wilson, in press) notes that cultural competency is an integral concept for those working within the philosophical assumptions of the transformative paradigm. Cultural competency is a critical disposition that is related to the researcher’s ability to accurately represent reality in culturally complex communities. Symonette (2004) makes explicit the implication that culturally competent researchers must understand in a dynamic sense the implications of power differentials in terms of access to resources that are necessary to improve quality of life. Cultural competence in research can be broadly defined as a systematic, responsive mode of inquiry that is actively cognizant, understanding, and appreciative of the cultural context in which the research takes place; it frames and articulates the epistemology of the research endeavor, employs culturally and contextually appropriate methodology, and uses community-generated, interpretive means to arrive at the results and further use of the findings (SenGupta, Hopson, & Thompson-Robinson, 2004). The benefits of cultural competency and culturally responsive research approaches include (but are not limited to) the ability to transform interventions so that the community perceives
them as legitimate (Guzman, 2003). The American Psychological Association (2002) recommends that the researcher serve as an agent of prosocial change to combat racism, prejudice, bias, and oppression in all their forms. To this end, culturally competent researchers endeavor to build rapport despite differences, gain the trust of community members, and reflect on and recognize their own biases (Edno, Joh, & Yu, 2003).

**Ontology**

Adhering to the beliefs associated with the transformative axiological assumption leads to framing the ontological assumption in terms that reflect awareness of power issues. The transformative ontological assumption rejects cultural relativism, while recognizing that different versions of what is believed to be real exist.

Damage is done when differences of perceptions of what is real are accepted, and when factors are ignored that give privilege to one version of reality over another, such as the influence of social, political, cultural, economic, ethnic, gender, and disability lenses in the construction of reality. In addition, the transformative ontological belief emphasizes that which seems “real” may instead be reified structures that are taken to be real because of historical situations. Thus, what is taken to be real needs to be critically examined via an ideological critique of its role in perpetuating oppressive social structures and policies. (Mertens, Bledsoe, Sullivan, & Wilson, 2010, p. 198)

The researcher has a responsibility to interrogate from whence those versions of reality come, in terms of issues of power that might be associated with economics, disabilities, gender, deafness, religion, geographic location, sexual orientation, and the myriad other variables that are associated with differential access to power. The transformative research perceives that different versions of reality are given privilege over others and that the privileged views need to be critically examined to determine what is missing when the views of marginalized peoples are not privileged. The important question is, Which version of reality provides an understanding that can lead to changes in the status quo that will lead to furthering social justice?

This ontological assumption extends to include concepts related to identifying those dimensions of diversity that are relevant in each context as determinants of access to power and perceived legitimacy of versions of reality. For example, in the Deaf community, researchers need to understand the historical legacy of oppression of Deaf people at the hands of hearing people. A significant event occurred in 1880 at the International Congress on Education of the Deaf in Milan that resulted in more than 100 years of oppression based on denial of their rights to use Sign language.
The basic human rights of Deaf citizens, as expressed through their freedom to use Sign languages and to receive quality education in Sign, have been severely oppressed as a consequence of the Congress of Milan. It was 160 oralist educators who passed the resolutions to ban Sign languages and who declared that the oral method was a better one to use in Deaf education. (Momotiuk & Folino, 2009)

In 2007, the World Federation of the Deaf passed a resolution that recognized that Deaf people have the same human rights as all social groups and that Sign language is a human right for all members of the Deaf community. This resolution is in alignment with the United Nations Convention on the Rights of Persons with Disabilities that includes two relevant articles: Article 21 recognizes and promotes the use of Sign languages, and Article 24 calls for the support of learning Sign languages and the linguistic identity of the Deaf community. Yet in many countries, Deaf people are still denied their rights to communicate in Sign language and to receive their education through this visual medium.

**Epistemology**

The transformative epistemological assumption raises questions about the nature of relationships between researchers in terms of who controls the investigation, not only when it is conducted by nonmembers of marginalized communities, but also when the researchers are community members or teams of members and nonmembers are used. It also raises questions about the nature of knowledge in terms of power and privilege. To understand differing versions of reality and how they are synergistically related to power issues, the researcher needs to establish an interactive link with community members. This involves understanding the historical and social contexts, as well as building relationships that acknowledge power differences and support the development of trust amongst the involved parties.

The formation of trusting relationships in research are fraught with challenges on many levels, not least of which is the tension between being *objectively neutral* and being involved with community members. Christians (2005) challenges the notion that a “neutral, objective observer will get the facts right” (p. 148) because of power relations that need to be acknowledged. How do we engage multivocal and cross-cultural communities in meaningful dialogues? Many valuable insights can be gleaned from scholars who write about epistemologies from the perspectives of feminists, indigenous peoples, and disability rights. For example, Dillard (2000, cited in Wright, 2003, p. 2) describes an endarkened feminist epistemology that serves as tool for African Americans to disrupt White hegemonic research paradigms. She sees the researcher’s role as a supportive, reflective activist who works to challenge the status quo.

Downey (2009) provides a rich example of coalition building after 9/11 as a response to hate crimes against Muslims in Orange County, California. Orange County has a Human Relations Council (OCHRC) that was established in 1971. Over the
years, they served an active role in addressing issues of social justice and diversity by building networks of community organizations and undertaking such activities as hate crime monitoring and leadership capacity building. Important aspects of building coalitions are revealed in the description of the evolution of the Council: “All of the community building work was built on the foundation of one-to-one relationships” (p. 103) for several decades. The resulting network includes community activists and leaders throughout the county. Thus, their history in the community positioned them as a vehicle for addressing hate crimes against Muslims after 9/11. Shortly after the attack, OCHRC held a news conference to express community solidarity with the Council on American-Islamic Relations with whom they had a strong relationship for over 30 years as part of their interfaith network. Together, they developed ways to combat hate crimes, build understanding, and raise awareness. They began with “living rooms dialogues,” small multiethnic groups that met informally in people’s living room. The groups met three times, twice to establish understandings and once to develop an action plan. In addition, OCHRC became involved as a mediator between Arab business leaders and police when the leaders felt they were being unfairly targeted and harassed. The result was building trust between the two groups and the establishment of special law enforcement representatives to address issues in this community.

Downey’s (2009) explanation of the building of coalitions has epistemological relevance for the transformative paradigm because it illustrates the complexity of building trusting relationships when there are potentially hostile members of different constituencies. If researchers are to conduct transformative research, they need to have understandings of how to build trusting relationships in these types of contexts.

**Methodology**

The transformative methodological assumption is logically derived from the preceding three assumptions. The axiological assumption leads to researchers planning their research in accord with research guidelines developed by the community itself. The ontological assumption calls upon the researcher to develop strategies to determine different versions of reality, the factors that are related to those versions in terms of power and privilege, and the making visible of the potential for social change associated with those different versions of reality. The epistemological assumption leads to establishing relationships in order to determine ways that the study can be more culturally responsive.

Inclusion of a qualitative dimension in methodological assumptions is critical in transformative research and evaluation as a point of establishing a dialogue between the researchers and the community members. Mixed methods designs can be considered to address the informational needs of the community. However, the methodological decisions are made with a conscious awareness of contextual and historical factors, especially as they relate to discrimination and oppression. Thus the formation of
partnerships with researchers and the community is an important step in addressing methodological questions in research (Mertens, 2009, p. 59).

Thus, transformative methodological assumptions suggest that researchers start with qualitative data collection moments to learn about the community and begin to establish trusting relationships. They can supplement their qualitative data collection at this time with quantitative data that might be available from extant data sources, such as government statistical repositories. The research would rarely occur as a one-off data collection with one type of data. Hence, the most likely scenario would be a mixed methods design with cyclical collection of data that feeds into subsequent decisions about how to use the information to move the research to the next level or to make changes in the community.

Silka’s (2009) research with the Laotian refugees in Massachusetts illustrates the transformative cyclical mixed methods approach. She works with researchers from a university in Massachusetts and trains Laotian leaders to become part of the research team. They collect qualitative data to understand the life conditions of the refugees, and they review statistical data about their home country and their characteristics since moving to the United States. In addition to publishing scholarly papers in English, they hold community events (such as a festival about fishing) where information collected to that point can be shared with community members in their own language who can confirm, deny, or extend the data. This transformative, cyclical mixed methods approach resulted in the Laotian people’s gaining an understanding of the relation between the health problems they were experiencing and their customary consumption of fish. The fish came from a lake that was polluted where signs were posted in English about the dangers of eating the fish. However, the Laotian people came to the United States without a print form of language and they fish at night. Hence, they could not see the signs, and if they could see them, they could not read them.

This sharing of data led to the agreement on the part of the Laotian people to work with the university researchers on a second cycle of mixed methods research. The team developed interventions to provide alternative sources for fish for the Laotian people from places that were safe. The quantitative portion of the study involved testing to determine levels of poisoning in their blood. The qualitative portion involved an ongoing discussion with community members about alternative sources of fish and the effect of changing the source of their food on their health. Silka (2009) explained that it was very important to protect the Laotian people from researchers who wanted to study them because they are seen as “exotic.” Rather, the transformative mixed methods approach focused on identifying things of importance to the Laotian people, strategies for data collection that were appropriate to them, and use of the information to stimulate social action.

The transformative methodological assumption has implications for every aspect of the research methods, from the development of a focus for the study to the design, sampling, data collection strategies, data analysis and interpretation, and use of the findings. Mertens et al. (2010) provide multiple examples of the infusion of the transformative assumptions in their research with people who are Deaf, African American
and Latino communities, people with disabilities, and people who are the beneficiaries (or victims) of international development programs.

**Challenges and Benefits of Using Transformative Mixed Methods**

Mixed methods can be used to provide a more complete picture of the phenomenon under study than is possible using a single method. For example, Huato and Zeno (2009) studied variables that influence gender differences in income using quantitative data analyzed using complex regression statistics. They were able to conclude that differences in gender income between husbands and wives are explained by family income, educational attainment, and race-ethnicity. They reported that the higher the family income and educational attainment, the larger the gap between husbands and wives. They also investigated differences by race that revealed smaller gaps between spouses when the husband was non-White. Women who allocate more time to labor in their home have larger spousal gaps than those who make use of services to reduce their domestic labor.

Huato and Zeno (2009) acknowledge that the power relations between husbands and wives are very complex. Because their study used only one method (quantitative), they are unable to provide insights into the dynamics that explain the differences that they found. They conclude,

> Except for what can be inferred on the basis of the individual incomes and characteristics of each spouse captured in the sets, the data used offer little insight into the way families negotiate, pool, or apportion their resources and efforts, opportunities and risks, and rights and responsibilities. Clearly, the relative individual contribution of each spouse to family income is one among a host of other elements affecting the power relationship between spouses. (p. 273)

Hodgkin (2008) provides a contrasting example of a transformative feminist mixed methods study of differences between men and women in terms of their social capital. She began with a quantitative survey of a large representative sample of men and women about their social, community, and civic participation. She followed this with a qualitative data collection stage in which she conducted in-depth interviews with women about their processes of interacting with the social, community, and civic settings and how they felt about their activities and their lives. Thus, she was able to broaden understandings of differences between men and women beyond economic differences to include social capital. Hodgkin reported that motherhood was a significant variable in terms of increasing women’s social capital and their feelings of satisfaction with their lives. This variable was not included in the Huato and Zeno (2009) study, thus overlooking an important influence that might decrease earnings for women while it increases their positive feelings about life.
Summary and Conclusions

The transformative paradigm provides an umbrella for researchers who view their roles as agents to further social justice. The axiological assumption provides a conceptual framework from which the other assumptions of the paradigm logically flow. Researchers who recognize the importance of being culturally responsive are inclined to learn the norms of behavior in communities, as well as to explore different understandings of ethical research approaches. The transformative ontological assumption suggests that there are different opinions about what is real based on different lenses of privilege that people bring to the situation. However, all the versions of reality do not have equal legitimacy if the purpose of research is to challenge the status quo and bring about social change. Epistemologically, this places the researcher in a position of needing to establish a trusting relationship with the community members. This is a challenging undertaking for a multitude of reasons; however, there are good models that are discussed here and elsewhere that researchers can use to determine the best approaches in their particular context. Methodologically, the transformative paradigm does not prescribe particular approaches. The implications for methodology from the other philosophical assumptions are that researchers need to engage in qualitative data collection moments to determine the focus of the inquiry, as well as to gather information about culturally appropriate methods for the research in terms of design, sampling, and data collection. Hence, it is likely that mixed methods will be the choice of the transformative researchers; however, that is not an absolute requirement.

Challenges arise in terms of the accepted role of the researcher: Should researchers be distant from their subjects to eliminate bias? Or should they be close to and involved with their participants to eliminate bias? If the researcher is not a member of the community, what are the measures that are needed to establish a trusting relationship? Are there circumstances in which a trusting relationship is not advisable and could even be viewed as harmful to the conduct of valid research? Whereas the transformative paradigm raises many questions, answers to some of these questions await further work in this area. However, there are many examples of transformative research using mixed methods that illustrate a variety of approaches to research that are commensurate with this paradigm.

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