

# 6

## DECOLONIZING EVALUATION

Many tribes place a strong value on sacred sites and spiritual practice. Because Western research and evaluation paradigms tend to see Science and faith in mutually exclusive ways or ways that prioritise Science over faith, this can cause tension in the evaluation process. Western philosophies are also often anthropocentric—prioritising human over animal relations and sacred places, or refusing to recognise the nama or spiritual energy in things non-human.

**Katie Johnston-Goodstar** (2012)

All evaluation is value based and representative of particular value commitments. “Appropriateness,” then must take account of the social, cultural, and political context of the location where evaluative work occurs, as well as the social location of the evaluator

**Hayley M. Cavino** (2013)

### **Overview**

Of utmost important to the evaluation field is the extent to which evaluators demonstrate cultural competence; acknowledge the complexity of cultural identity; recognize the dynamics of power; recognize and eliminate bias in language; and employ culturally appropriate options and evaluation frameworks emanating from indigenous value systems, epistemologies, and realities. Indigenous evaluators are talking back to the evaluation profession challenging the hegemony that still dominates who can evaluate, what can be evaluated, and with what methodologies (Cavino, 2013). The chapter situates evaluation in the formerly colonized within the global discourse on decolonization of evaluation.

## LEARNING OBJECTIVES

By the end of this chapter you should be able to do the following:

1. Debate how evaluation can address the interests, needs, and culture of the formerly marginalized societies and still remain connected to international and global dynamics and good practices.
2. Critique the universal application of evaluation tools across diverse contexts.
3. Apply indigenous worldviews, values, and epistemologies to the evaluation process.
4. Apply cultural validity to the evaluation process.

### *Before You Start*

Read this story excerpt, and discuss any similar situations you have observed or heard about.

In the village of Shakawe in Northern Botswana, the government introduced and distributed chickens in an effort to alleviate poverty. The sponsor deemed the project a success. Within three months, all the chickens had disappeared. The community members quipped, "We did not need chickens; we needed boats to go fishing."

## WHY EVALUATION

Well-performed evaluation is expected to inform development planning and outcome. The evaluation should focus on the contribution of development to the world of individuals, their relatives, others, and the environment upon which they depend (Bellagio Leaders Forum, 2012). Thus, it should generally contribute to societal progress by providing invaluable information to policy and decision makers and advancing understanding of how development can best be approached globally. There is also mounting evidence that evaluation is globally being embraced as witnessed by the following:

- The declaration of 2015 as the Year of Evaluation by EvalPartners and its inclusion in the 2030 Agenda for Sustainable Development, reinforced by the UN General Assembly Declaration and the subsequent launch of the Eval Agenda 2020 (<https://evalpartners.org/global-evaluation-agenda>)
- The explosion in the evaluation profession worldwide, particularly in the Global South
- The growing interest in the private sector in measuring social impact
- The need for increased evidence-based policy design and implementation

Despite the important role that evaluation plays in development, like research, it has become a colonial prejudice that reinforces uneven and biased power relations (Bowman & Dodge-Francis, 2018; Cavino, 2013; Held, 2019). In their concept paper, the South to South Cooperation (2018) authors noted the following:

- There is a lingering perception that everything that comes from the Global North is superior and scientifically more robust, encouraging the Global South to be a passive recipient of “tried and tested” evaluation theories and practices.
- There is a dearth of visible original work in the Global South, thus, commissioned evaluations, M&E systems, and education in evaluation continue to be informed by dominant paradigms from the Global North.
- Evaluation viewed through the lenses of the Global North does not attend sufficiently to the intricate contextual issues shaped by societal cultures and traditions in the Global South.
- Many practitioners use frameworks developed by funders and commissioners with a narrow focus on results and without engaging with the approaches that can inform the customization of their data collection and analysis to local contexts and societal cultures.
- Capacity strengthening tends to transfer knowledge from the Global North, and those who teach have been steeped in ideologies and frameworks from the latter, while few academic institutions in the Global South see evaluation as a legitimate area of study and work. Fresh perspectives, novel ideas, and inspiring innovations are thus severely limited.

The terms *South* or *Global South* are defined as developing countries that are located primarily in the Southern Hemisphere. South-South cooperation thus refers to collaboration among developing countries in the political, economic, social, cultural, environmental, and technical domains (South to South Corporation, 2018).

The Global South to South perceptions are reinforced by other voices from around the world as follows:

- There is blind reliance on Eurocentric models, strategies, techniques, and research methods that often lead to inadequate assessments, wrong prescriptions, and flat evaluation models (Jeng, 2012).
- The bulk of evaluation in low- and middle-income countries are on aid programs or small-scale philanthropic projects that do not necessarily translate into successful scalable national development program interventions (Ofir & Shiva Kumar, 2012).
- Evaluation is dominated by external evaluators often ignorant of the context and culture of the people.
- The focus is on evaluation outcomes as defined by the sponsors at the expense of the beneficiaries’ views on what counts as program success.

- Donors use their own evaluation systems rather than country systems to ensure visibility of their efforts (Leautier, 2012).
- Programs implemented are either of no relevance or are not a priority to the communities.
- Communities have no voice in the initiation of the programs, their goals, purposes and the evaluation designs, implementation, methodology, or analysis and reporting.
- Evaluation reports and recommendations are submitted to the funders in formats that they require and, in most cases, not submitted to the communities
- Mainstream evaluators fail to address the broader struggles of indigenous people which include sovereignty, self-determination, and decolonization (Cavino, 2013).

Elsewhere, Chilisa, Major, Gaotlhobogwe, and Mokgolodi (2017) noted that evaluation is a lens through which judgments are made and standards set about what should be considered to be real program outcomes, knowledge that measures that reality, and the values that support the practice. In developing countries, it has become the worst instrument of epistemological imperialism: an attempt to determine the kinds of facts to be gathered, the appropriate techniques for gathering and theorizing the data, and reporting on it. Unlike research where there is a choice on using knowledge that is generated, evaluation has as one of its objectives accountability and utilization of evaluation results. As a practice, evaluation makes compelling judgments about the realities considered as relevant to measure accountability and ways to improve interventions and thus contribute to development.

Indigenous scholars are challenging the way evaluation research is conducted and calling for extending the decolonization and indigenization of methodologies to the evaluation discipline. From the previous chapters, we note the following:

- Paradigms inform the methodologies and methods, research processes, priorities, choices, actions, and dissemination of research findings. Consequently, evaluators need to engage with paradigms that inform their evaluation methodologies.
- Indigenous paradigms need their own space so that they can engage with Western approaches (Held, 2019; Kovach, 2009; Romm, 2018; Wilson, 2008). There is a need to locate indigenous evaluation in its paradigmatic space.
- Indigenous pathways to research emanate from indigenous worldviews, philosophies, and indigenous knowledge not available to nonindigenous research. There is need to identify evaluation frameworks that emanate from the philosophies and value systems of indigenous peoples.
- A methodology separated from its overarching paradigm is not sufficient for decolonization (Held, 2019; Kovach, 2009; Romm, 2018; Walter & Andersen 2013; Wilson, 2008). A predominantly indigenous evaluation approach assumes evaluation practices informed by an indigenous paradigm or worldview.

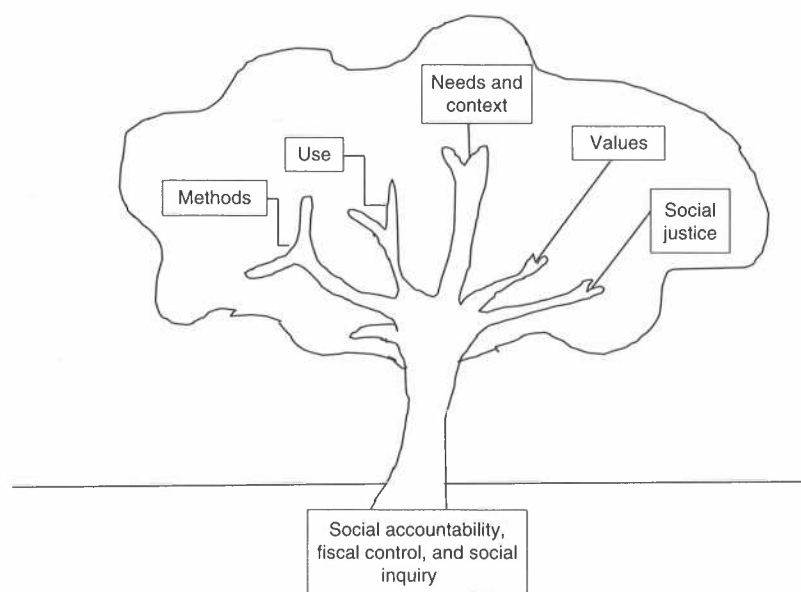
- Relationality is a common element across indigenous worldviews; hence, we can talk of a relational indigenous paradigm with shared philosophical assumptions about the nature of reality, knowledge, and values. Refer to Chapter 2.
- Within a relational indigenous paradigm are worldviews specific to the histories, experiences, and cultural beliefs and practices of indigenous peoples that should guide methodologies. Refer to Chapter 5.

## EVALUATION DISCOURSE IN A GLOBAL CONTEXT

Evaluation theory and methodology has been aligned to the four research paradigms, namely, the postpositivist, the constructivist, the pragmatic, and the transformative paradigms discussed in Chapter 2. Each of the four paradigms is linked to an evaluation branch under the evaluation tree metaphor. There are four branches associated with the big four paradigms discussed in Chapter 2. Carden and Alkin (2012) articulate three branches, namely the *use*, *methods*, and *valuing* and proposes a fourth branch that they call *context*. Mertens and Wilson (2019) have articulated four branches, namely *use*, *methods*, *valuing*, and the *social justice* branches. In this chapter, a fifth evaluation branch called *needs and context* is suggested under a postcolonial indigenous paradigm. See Figure 6.1.

Selecting an evaluation tree branch that will guide your study is an important step in designing the evaluation. Within each tree branch are different models and frameworks that guide the evaluation. When evaluation in the contexts of the marginalized people of

FIGURE 6.1 ■ A Five-Branch Tree of Evaluation Approaches



the world, including Africans, indigenous people of Canada, Australia, Asia, and North America, is discussed, often the questions are on the contributions to the field of evaluation originating from these contexts. In this debate, Carden and Alkin (2012) classify the common approaches used in the Low and Middle Income Countries (LMIC) under three branches, *use*, *methods*, and *valuing*, according to whether they were transferred from the global North; they were adapted to suit the sociocultural, political, and ecological setting or they originated in these countries.

### Postpositivism and the Methods Branch

Here the focus is on quantitative methods that can measure the merit or worth of a program. The logical framework and the International Initiative on Impact Evaluation (3ie; <https://www.3ieimpact.org>) are examples of quantitative methods that were transferred to LMIC. The 3ie focuses on conducting experiments and quasi-experiments to measure project impacts. The randomized control designs are common in this approach. The main criticism of these designs is that coming from the postpositivist perspective, the approach requires the evaluator to narrow the evaluation questions to what is measurable and quantifiable. The complexity of social problems, diversity of contexts, relationships, and connections of human beings to one another and to the ecological systems is peripheral to the evaluation process. These approaches were transferred to LMIC, and many bilateral development agencies and multilateral development banks, for example, the World Bank, require its use without any adaptation to the diverse contexts under which interventions are implemented (Carden & Alkin, 2012).

### Pragmatism and the Use Branch

The focus is on data that are useful to the stakeholders. Mixed methods designs are preferred over other methods. A common tool used in the developed countries under this branch is the logical framework. The logical framework is a results-based management tool with a focus on ensuring that the results of the evaluation are used. Carden and Alkin (2012) refer to it as an example of a tool that was transferred to the LMIC with very little adaptation.

### Constructivism and the Value Branch

The value branch focuses on identifying multiple values and perspectives by using predominantly qualitative approaches. Carden and Alkin (2012) identify participatory rural appraisal approaches as examples of valuing methods used in LMIC. Participatory research methods are discussed in Chapter 12. These approaches, although developed in the Global North, have been adapted for use in LMIC.

### The Transformative Paradigm and the Social Justice Branch

Mertens and Wilson (2019) have added the social justice branch to the tree. This framework promotes the views and voices of marginalized groups on diverse issues that include human rights, gender, equality, race/ethnicity asymmetries, and geopolitical

power imbalances. For example, whose voice is heard when the majority of evaluators in Africa are from the Global North? Mertens and Wilson (2019) argue that evaluation frameworks by scholars from Africa and indigenous scholars of Canada, Australia, Asia, and North America not visible in the evaluation tree metaphor by Carden and Alkin (2012) fit in the social justice branch.

### The Postcolonial Indigenous Paradigm and the Needs and Context Branch

Culture and indigenous worldviews, philosophies, paradigms, and knowledge not available to nonindigenous research should inform the realities that we seek to articulate. There are emerging indigenous evaluation approaches with clear roots in the culture, philosophy, history, and experiences of the people. These frameworks clearly call for an evaluation approach that begins by questioning who initiated the programs, the priorities addressed by the programs, and the programs' cultural and contextual appropriateness. They fit in the context branch suggested by Carden and Alkin (2012). Culture infuses all contexts, while context grounds all aspects of the evaluation (LaFrance, Nichols, & Kirkhart, 2012). In line with the focus on culture and context, indigenous evaluators discuss culturally responsive indigenous evaluation (CRIE) (Bowman & Dodge-Francis, 2018) and evaluations informed by indigenous paradigms and worldviews. Rog (2012) has identified four aspects of context, namely problem context, intervention context, setting evaluation context, and decision-making context. CRIE recognizes that demographic, sociopolitical, and contextual dimensions, locations, perspectives, and characteristics of culture matter in evaluation. CRIE addresses issues of context and intersectionality by questioning how multiple forms of inequality and identity interrelate in different contexts and over time. Culturally responsive indigenous evaluation frameworks call for use of evaluation tools and frameworks that are informed by indigenous communities' worldviews and cultures. What I have found interesting is that when indigenous scholars from North America and Canada address context in evaluation, they note the United Nations Declaration on the Rights of Indigenous People. The declaration calls for addressing the minimal standards for the survival, dignity, and well-being of indigenous people. Despite this declaration, mainstream evaluation hardly addresses the core issues of indigenous communities such as sovereignty, self-determination, and decolonization of the evaluation process (Cavino, 2013). To locate the discourse on indigenous evaluation in a new branch is thus to situate indigenous research and evaluation in its own paradigmatic space to enable a dialogue with nonindigenous paradigms.

### BLIND RELIANCE ON EUROCENTRIC TOOLS

As already noted, one of the widely used evaluation tools transferred from North America and Europe for use by donor agencies in assessing aid flows is the logical framework. In its simplest form, the logical framework is a 4x4 matrix with vertical and horizontal columns. The vertical columns depict goal, purpose, output, and activities, while the horizontal columns represent project description, objective verifiable indicators, means of verification, and risks and assumptions. It is a useful tool that helps to comprehend

the intervention objectives, activities, and inputs. It delineates how target values and measurement tools are selected. It further identifies the external environment factors that may hinder the realization of objectives, activities, and outputs.

The logic frame, however, can also serve as an example of how evaluation tools can reinforce relations of power and control (Chambers & Pettit, 2004). It reinforces unequal power relations between the donors and the aid recipients. For example, it inhibits process and participation through donor-induced meetings on the logical frame that hardly include the disempowered recipients, for example, the poor in poverty reduction interventions. Its focus on one single core problem of the intervention constrains the evaluation process given the multiple changing realities of a complex world. It is gender, context, and culturally insensitive. Its prolonged use in developing countries despite the frustration it generates is an indication of the silencing power of the aid agencies (Chambers & Pettit, 2004).

The logic frame is but one tool put in place by many bilateral and multilateral agencies that fund development projects in the Global South or the developing world. When used in their original form without adaptation, which is common practice, they become a form of technology transfer from North America and Europe to the Other. At times, they present a singular approach for all activities in an intervention.

### ACTIVITY 6.1

Read an extract of the hypothetical water project that used the logic frame for planning, monitoring, and evaluation, and answer questions that follow

#### The Water Project

Development workers identified an impoverished peripheral community with poor access to water. A donor agency contracted a nongovernmental organization (NGO) to develop and deliver water supplies. The local government authority considered the project to be valuable. The logic frame reiterated the overarching goal as contributing to alleviating poverty through enhanced health, resulting from improved water supply. The outputs contributing to achieving this purpose were improved access to better-quality water, the establishment of a water users' committee, and a sustainable system of maintenance by community members to support water delivery. Specific and verifiable activities included enclosing and

fencing off a spring on a nearby hill; constructing two large water-storage tanks; laying pipes with taps to 50 household clusters; and employing a part-time maintenance officer to keep everything in working order. Project funds were disbursed on time, and some community members worked hard to assist with laying pipes and taps to their homes. Community ownership seemed to be present; all looked on track. A week after the keys to the fenced-in water tanks were handed to the village head, some peripheral pipes had been cut, with valuable water flowing away; a few taps were opened overnight, and the tank's enclosure fence was cut with wire clippers; animals shared the water with the community; and young men from up the hill were seen milling around in the early morning.

#### What Went Wrong?

The project team knew that the village was of mixed ethnicity, but they did not realize that the

*(Continued)*



(Continued)

villagers living in the area where the tube wells had been sunk and the water tanks placed were members of the same ethnic clan as the village head. The fenced-off spring at the hilltop was in the subvillage of the other community, those of a different ethnic background from the village head. The leader of those from the hilltop explained that his ancestors had always recognized that the water needed to be protected and revered, that it was a communal resource, and it had always been available to any locals or visitors prepared to trek up the hill to get it. Community members near the spring at the hilltop and on the upper slopes complained that they had lost access, and furthermore, that their homes on the hillside were not among those chosen for receiving piped water, which was available farther down the hill. No recognition of those who had protected the source of the water for hundreds of years had been given, and the ancestors of those on the hilltop were angry.

Still further complications were identified. The person employed to do the maintenance was the nephew of the village head. The water users' committee comprised members, mostly men, who were from the same clan as the village head, plus only one member of the other ethnic community—a

local shopkeeper who had negotiated for the provision of water near his shop and small tearoom. There were more and more problems unfolding: Women from both communities had no say in the ongoing management of the resource.

Source: Grove, N. J., & Anthony, B. (2008). Beyond the logic frame: A new tool for examining health and peace building initiatives. *Development in Practice*, 18(1), 66–81.

1. Draw the logic frame, and fill the 4x4 matrix using information in this hypothetical project.
2. Discuss gender and cultural sensitivity in this project.
3. Discuss the danger of treating diverse communities as if they are the same.
4. What is the role of spirituality and cultural taboos in this project? How can they be factored into the evaluation of projects?
5. What would have been the best way to plan, monitor, and evaluate this project?
6. Demonstrate how the logic frame can be adapted to make it gender and culturally responsive to the needs of the stakeholders and clients.

## THE SHIFT IN EVALUATION PRACTICE

It is clear from this case study that context plays an important function in evaluation. The role of context in evaluation has been a subject of discussion as demonstrated by Stufflebeam's Context Input Process Product model; Stake's responsive evaluation model; Weiss on the social context of program evaluation; Wholey's work on managers and decision-making context; and Patton's text on organizational contexts (Fitzpatrick, 2012). These contextual factors were aimed to give voice to managers and program participants and to increase the use of evaluation findings. Pawson and Tiley (1997) developed an evaluation model that used context to explain differences.

Today's issues of context include the following:

- In developing countries, problematizing evaluation that is sometimes viewed as a Western notion imposed by former colonial powers
- Sovereignty, self-determination, and decolonization of the evaluation process (Cavino, 2013)

- Design and framing of evaluation informed by indigenous philosophies and worldviews and theoretical frameworks that include a decolonization discourse

There has thus been a shift toward requiring evaluation to consider context and cultural sensitivity, awareness, competence, and responsiveness. The American Evaluation Association (AEA), for instance, in 2011 adopted a statement on cultural competence in evaluation. The statement noted that the evaluation profession suffers from a history of the use of inappropriate evaluation methods among indigenous nations and developing countries driven by Western thought. To ensure recognition, accurate interpretation, and respect for diversity, evaluators should ensure that the members of the evaluation team collectively demonstrate cultural competence, acknowledge the complexity of cultural identity, recognize the dynamics of power, recognize and eliminate bias in language, and employ culturally appropriate options. The notion of cultural competence is, however, still steeped in Western hegemony (Cavino, 2013). Cavino (2013) notes that competency is predominantly understood as the possession and demonstration of knowledge, skills, and attitudes that are needed for the level of performance of the evaluator. This definition of competency has invariably focused on access to indigenous participants, subject programs, or knowledge systems, ignoring issues of accountability to the communities and use of indigenous research and evaluation frameworks and methodologies to initiate meaningful change.

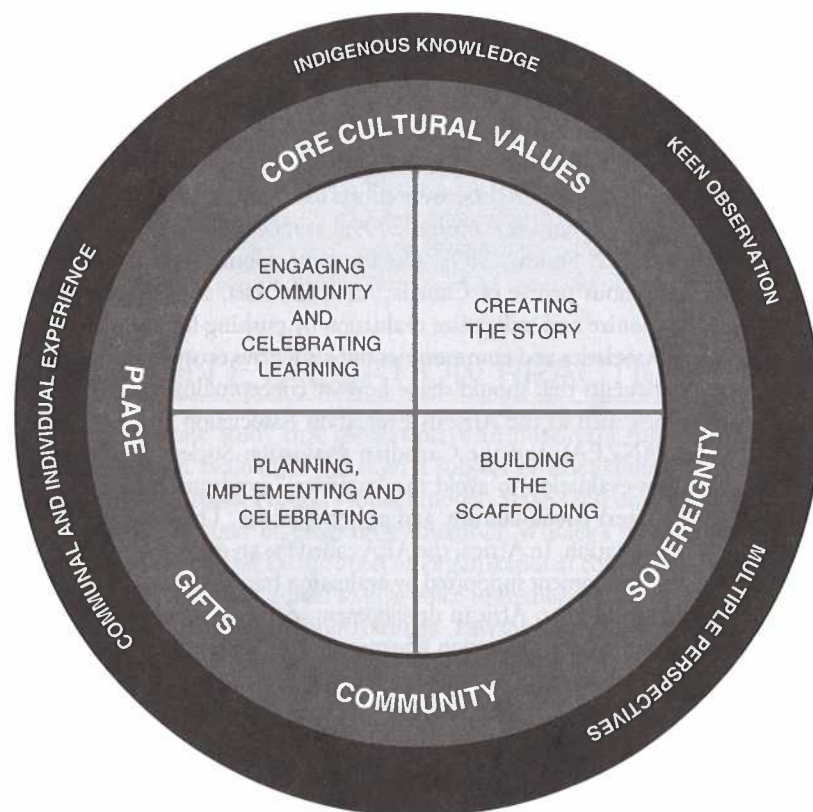
Evaluation in colonized spaces requires the design and framing of evaluation informed by indigenous philosophies and worldviews and theoretical frameworks that include a decolonization discourse and indigenous theory (Laenui, 2000; Smith, 1999; Wilson, 2008); postcolonial theory, critical race theory, and tribal critical theory (Bowman & Dodge-Francis, 2018); and postcolonial indigenous feminisms (see Chapters 2 and 13). In North America, among indigenous nations, there were efforts to articulate indigenous research and evaluation approaches (Chouinard & Cousins, 2009; LaFrance & Nichols, 2010; LaFrance, Nichols, & Kirkhart, 2012; Smith, 1999). The formerly colonized of the world, including Africans and indigenous people of Canada, Australia, Asia, and North America, are exploring ways to decolonize and indigenize evaluation by pushing for evaluation that does not only inquire about societies and communities but also views ecosystems and global systems as essential components that should shape how we conceptualize evaluation. Leading professional associations such as the African Evaluation Association (AEA) Aoteore New Zealand Evaluation (ANZEA), and the Canadian Evaluation Society (CES) continue to push the boundaries of evaluation to avoid the “sameness” syndrome and to bring to the center of evaluation context issues, culture, and power relations. There is a need to address complexity in global evaluation. In Africa, the AEA called for an evaluation agenda that prioritizes evaluation for development supported by evaluation frameworks and techniques that are rooted in African worldviews, African development, Africa’s vision, models of poverty reduction that go beyond poverty reduction schemes, and Africa’s models that show respect for human dignity. There is an emphasis on an evaluation theory of change that is informed by worldviews that see interconnectedness between the people and the environment, is rational, and, at the same time, mystical and spiritual (Chilisa et al., 2017). Johnston-Goodstar (2012), writing from Canada, calls for indigenous evaluation with a cultural lens and evaluation approaches embedded in indigenous worldviews/paradigms that consider identity, epistemology, and spirituality. He contends that indigenous evaluation should be situated in the context of a specific place, time, and community. Programs should be understood within

their relationship to place, setting, and community, and evaluations should be planned, undertaken, and validated in relation to cultural context. What follows is a discussion of perspectives on decolonizing evaluation using a paradigmatic lens and culturally responsive indigenous frameworks and models arising from indigenous paradigms and worldviews. Evaluation paradigmatic perspectives from Africa and Asia are discussed as well as culturally responsive indigenous evaluation frameworks and indigenous multicultural validity.

### Culture and Context Evaluation Models: Context First Approach

LaFrance et al. (2012), have proposed a context-first evaluation approach based on the indigenous knowledge and worldviews of the American Indian Communities. They note that the framework is defined by context and understood within it. It defines the epistemology, methodology, and method and thus it adopts a "context-first approach." Figure 6.2 illustrates the model.

FIGURE 6.2 ■ Indigenous Evaluation Model



Source: LaFrance, J., Nichols, R., & Kirkhart, K. E. (2012). Culture writes the script: On the centrality of contexts in indigenous evaluation. In D. J. Rog, J. L. Fitzpatrick, & R. F. Conner (Eds.), *Context: A framework for its influence on evaluation practice*. *New Directions for Evaluation*, 135, 59-74.

In the outer circle, indigenous knowledge, which includes empirical knowledge and careful observation from multiple perspectives, provides the foundation for understanding the world through the culture of the people. Place, gifts, community, and sovereignty are the core values that inform the evaluation process, its implementation methodology, methods, and dissemination. The inner circle in the model reveals the centrality of story and method in guiding the design of evaluation in ways that respect tribal values and takes into account culture and community considerations.

### **Perspectives From the American Indian Higher Education Consortium: An Indigenous Evaluation Framework**

The American Indian Higher Education Consortium (ALHEC), consisting of 34 Indian tribally controlled colleges and universities, has articulated an indigenous evaluation framework bringing together indigenous ways of knowing and Western evaluation practice. The framework is an attempt to counter or refute the deficit-based Western-based evaluation practice that is associated with criticisms and stories of deficiencies and failings of indigenous peoples. Evaluation as taught in a Western tradition defines judgment and success by Western standards and fails to recognize strength in the communities. The history of this failure to serve communities should be recognized in evaluation practice and evaluation redefined so as to emphasize a movement from that of conveying judgment to that of viewing evaluation as an opportunity for learning. The proposed framework promotes evaluation that responds to indigenous people's concerns for usefulness of projects, restoration and preservation of values and culture, recognizes sovereignty, and is grounded in indigenous epistemologies (LaFrance & Nichols, 2010). Five core values are proposed to guide the evaluation. See table 6.1 What follows is a discussion of Five four values.

*People of Place.* There is emphasis on indigenous knowledge as intimately connected to the natural world. It encompasses learning about the place of the people within it and the people's relationship to the land. This connectedness to the environment is similar to African perspectives on people's relationships to the environment that include the living and the nonliving. Some narratives generate knowledge on the history of communities.

*Recognizing Gifts.* This core value emphasizes the importance of respect for the uniqueness of every context and the need to value their gifts. People are also expected to nurture the relationships they have with the universe and to maintain harmony and balance with nature. Evaluation thus considers the well-being in addition to uniqueness of every individual or situation. This requires multiple ways of measuring accomplishment in every situation or person. The evaluation of a student's progress, for example, will require that student growth is valued regardless of whether it meets the normative standard, including his or her sense of responsibility toward his or her accomplishment.

*Centrality of Community and Family.* Family and community are core elements of one's personal identity. Introductions, for example, include acknowledging tribal background,

lineage, ancestry, and kinship affiliation. The indigenous protocol of research participants introducing themselves has become a common practice in indigenous research (Drahm-Butler, 2016; Goduka & Chilisa, 2016; Karen, 2003). The narratives provide information about one's physical space, cultural location, ecological connection, and

**TABLE 6.1 ■ Core Values and Evaluation Practice**

Core Values	Indigenous Evaluation Practice
Indigenous knowledge creation context is critical	<ul style="list-style-type: none"> <li>• Evaluation itself becomes part of context; it is not an external function.</li> <li>• Evaluation needs to attend to the relationship between the program and community.</li> <li>• If specific variables are to be analyzed, care must be taken to do so without ignoring the contextual situation.</li> </ul>
People of place	<ul style="list-style-type: none"> <li>• Honor the place-based nature of many programs.</li> <li>• Situate the program by describing its relationship to the community, including its history, current situation, and the individuals affected.</li> <li>• Respect that what occurs in one place may not be easily transferred to other situations or places.</li> </ul>
Recognizing our gifts—personal sovereignty	<ul style="list-style-type: none"> <li>• Consider the whole person when assessing merit.</li> <li>• Allow for creativity and self-expression.</li> <li>• Use multiple ways to measure accomplishment.</li> <li>• Make connection to accomplishment and responsibility.</li> </ul>
Centrality of community and family	<ul style="list-style-type: none"> <li>• Engage the community, not only the program, when planning and implementing an evaluation.</li> <li>• Use participatory practices that engage stakeholders.</li> <li>• Make evaluation processes transparent.</li> <li>• Understand that programs may focus not only on individual achievement but also on restoring community health and well-being.</li> </ul>
Tribal sovereignty	<ul style="list-style-type: none"> <li>• Ensure tribal ownership and control of data.</li> <li>• Follow tribal institutional review board processes.</li> <li>• Build capacity in the community.</li> <li>• Secure proper permission if future publishing is expected.</li> <li>• Report in ways meaningful to tribal audiences as well as funders.</li> </ul>

Source: LaFrance, J., & Nichols, R. (2010). Reframing evaluation: Defining an indigenous evaluation framework. *The Canadian Journal of Program Evaluation*, 23(2), 13–31.

relationships to others and to the living and the nonliving (Chilisa et al., 2017). This can be part of the process of preserving and restoring peoples' cultures.

*Sovereignty.* There is emphasis on tribal sovereignty derived from a sense of place, language, history, and culture. It is an expression of Indian people's ongoing nationhood and the quest to reclaim indigenous knowledge as part of tribal sovereignty.

### **Evaluation Perspective From Hawaii and Aotearoa: The value Added Approach**

Kawakami (2007) articulates an indigenous evaluation framework that promotes the practice of indigenous worldviews, facilitates collaboration that embraces cultural and academic perspectives, and views and implements projects in the context of specific place, time, community, and history. The framework discusses indigenous perspectives on community culture, value of projects, and indigenous worldviews. Kawakami (2007) advocates for new and expansive paradigms that value cultural identity, relationships, sense of place, and projects' immediate and long-term contributions and service to the community. According to the framework, evaluation must be implemented as holistic and contextualized as specific to a place, time, community, and history. It should promote and practice indigenous worldviews and consider indigenous identity, epistemology, value, and spirituality. The framework encourages collaboration that brings together complementary knowledge from the community with that from the academia (Kawakami, 2007).

In the framework, value added by community projects is an important component of the approach. To add value to the community, the project should be culturally relevant and historically meaningful. To assess value added, evaluators should therefore inquire if the community members initiated and designed the project, determined the data collection methods, and were involved in the analysis of the data. Value added should go beyond a narrow cost-benefit perspective that is limited to review of financial activity; attainment or nonattainment of stated objectives, benchmarks, and timelines; and student test scores, completion of written deliverable products, and dissemination plans. Value added should be assessed by investigating the spiritual elements at play within a program and their possible influence in achieving the project outcomes either as defined by funder or community. Context of individuals and groups must play an important role in defining and achieving success.

Table 6.2 contrasts the methodology in an indigenous evaluation framework with that primarily practiced in mainstream evaluation. It focuses on who designs the project; its purpose and goals; and the driving question in the project, the methodology, data collection methods, analysis, format of presenting the findings, how findings are disseminated, and impact in terms of value added for the community. The main emphasis is that communities should initiate their programs and set their program goals based on their priorities and needs to promote sustainable benefits over time.

**TABLE 6.2 ■ A Conceptual Framework for Indigenous Evaluation Practice**

Functions	Primarily Indigenous (includes some mainstream and adds dimensions)	Primarily Practiced Mainstream
<b>Purpose and Goals</b>	Set by community agenda	Externally generated
<b>Driving question</b>	Has the community been affected in a positive way as a result of the program/project/initiative?	Have proposal goals/objectives been met?
<b>Methodology</b>	Quantitative, qualitative, and more	Primarily quantitative
<b>Data</b>	Multiple measures and sources of data that include spiritual, cultural, historical, social, emotional, cognitive, and theoretical situated information.  Graphics, narratives, culturally created manifestations oli (chant), and hula "valid" to that place.	Objective decontextualized data. Objective validity and reliability. Statistical significance and effect size.
<b>Analysis</b>	Cultural and environmental significance	Statistical and practical significance and effect size
<b>Format for Findings</b>	Narrative, mo'olelo (stories), relationships, photos, DVDs, CDs, videos	Written reports, charts, tables, graphs, databases
<b>Conclusions and Recommendations</b>	To promote courtesy, findings shared among community, evaluator, and funder.  Revised community agenda.	Fulfillment of contract. Submitted to funder.
<b>Impact</b>	Value added, lessons learned, clarity empowerment	Revised funding priorities

Source: Kawakami, A. J. (2007). Improving the practice of evaluation through indigenous values and methods: Decolonizing evaluation practice—Returning the gaze from Hawaii and AOTEAROA. *Multi-Disciplinary Research on Hawaiian Well-Being*, 4(1), 319-347.

**TABLE 6.3 ■ Evolution of the CRE Model**

Western Paradigm	Indigenous Paradigm	Blended CRIE Model Framework
Strengths, skills, and capacities	Relation and community building	Building community through sharing knowledge and strengths, using a strength-based approach
Challenges and barriers	Using your teachings	Seeing challenges as opportunities for applying teachings and community problem-solving activities
Gaps and needs	Humility and balance	Addressing needs and gaps by humbly asking for help, codeveloping solutions, and restoring balance
Solutions and strategies	Visioning and pathfinding	Using community and experiential knowledge to document evidence-based practices that guide decision making and a future sustainable vision

Source: Bowman, N., Mohican & Dodge-Francis, C. (2018). Culturally responsive indigenous evaluation and tribal governments: Understanding the relationship. In F. Cram, K. A. Tibbetts, & J. LaFrance (Eds.), *Indigenous evaluation. New Directions for Evaluation*, 159, 17-31.

## ACTIVITY 6.2

Read the article Bowman, N., Mohican/Lunaape, & Dodge-Francis, C. (2018). Culturally responsive indigenous evaluation and tribal governments: Understanding the relationship. In F. Cram, K. A.

Tibbetts, & J. LaFrance (Eds.), *Indigenous Evaluation. New Directions for Evaluation*, 159, 17-31.

Debate whether the blended CRIE model framework can be applied in your contexts.

### Blended Culturally Responsive Indigenous Evaluation

In Chapter 2, it was noted that there is a view that indigenous research and evaluation should be incorporated within the transformative paradigm (Cram & Mertens, 2015). Others (Held, 2019; Romm, 2018; Wilson, 2008) propose that the indigenous paradigms should be allowed to occupy their own space. Supporting this, Johnson and Stefurak (2013) have argued that it is possible for researchers to conduct research using different paradigms simultaneously, a stance they call dialectical pluralism. Bowman and Dodge-Francis (2018) present a culturally indigenous evaluation that integrates elements of an indigenous paradigm with that of a Western paradigm. Table 6.3 shows the elements in an indigenous paradigm and a Western paradigm and elements in the blended culturally responsive indigenous evaluation model that is a combination of the two paradigms. Bowman and Dodge Francis suggest that while the model was designed in a U.S. context, it can be applied globally.

### Decolonizing Evaluation Through a Paradigmatic Lens: The Eastern Paradigm

Craig Russon (2008) discussed an Eastern paradigm of evaluation informed by five axioms originated by Guba and Lincoln (2005), namely the nature of reality, inquirer-objective relationship, the nature of truth, attribution, and the role of values in inquiry. Assumptions about these axioms inform the Eastern paradigm of evaluation.

#### Nature of Reality

Russon (2008) contends that from an Eastern paradigm of evaluation, reality is transcendent and cannot be comprehended completely by the human mind. The implication for evaluators is that they should look for tools that approximate reality. Such tools will include metaphors, analogies, and systems models.

#### Inquirer-Objective Relationship

Russon (2008) compares the Eastern paradigm version of the inquirer-objective relationship to the rationalistic and naturalistic version. He observes that they both view the object of inquiry as separate and distinct and are both empirically based. In comparison,



in an Eastern paradigm, the inquirer and the object of inquiry exist in a separate state of nondifferentiation. In addition, the paradigm does not have an empirical orientation. The implication is that evaluation should pay attention to intuition and be hyperemphatic by practicing genuineness and concreteness (Russon, 2008).

### The Nature of Truth

Whereas in the rationalistic version truth is context free and context dependent, in the Eastern paradigm, truth is paradoxical. Paradoxical anecdotes call to question conventional values as well as concepts such as time, space, and reality. Implications for evaluation are that the evaluator should explore multiple sides of the story and practice balanced reporting.

### Attribution/Explanation of Action

The rationalistic version of evaluation is that every action can be explained as the results of a real cause and the action as correlated with the action. In the naturalistic inquiry, action can be explained in terms of multiple interacting factors, events, and processes. The naturalistic and rationalistic paradigms concur on the link between action and results. In comparison, in the Eastern paradigm, there may be action unattached to any event, process, or factor. In a project, the results may therefore arise not because of any activity but out of their own accord. The implication for evaluation is that evaluators should advance or design alternative tools to logic models and logical frameworks.

**TABLE 6.4 ■ Eastern Paradigm of Evaluation Axioms Linked to Practice**

Axiom 1: The nature of reality	<ul style="list-style-type: none"> <li>• Use metaphors, analogies, and models to approximate reality</li> </ul>
Axiom 2: The inquirer-objective relationship	<ul style="list-style-type: none"> <li>• Practice hyperempathy</li> <li>• Pay attention to intuition</li> <li>• Be in the moment and be real</li> <li>• Embrace ambiguity and uncertainty</li> </ul>
Axiom 3: The nature of truth statements	<ul style="list-style-type: none"> <li>• Explore multiple sides of each issue</li> <li>• Balance reporting</li> </ul>
Axiom 4: Attribution/explanation of action	<ul style="list-style-type: none"> <li>• Use alternatives to logic models and logical frameworks</li> <li>• Reserve judgments</li> </ul>
Axiom 5: The role of values in inquiry	<ul style="list-style-type: none"> <li>• Avoid either/or in favor of both/and thinking</li> <li>• Seek new insights into the object of inquiry</li> </ul>

Source: Russon, C. (2008). An Eastern paradigm of evaluation. *Journal of MultiDisciplinary Evaluation*, 5(10), 1-7.

## The Role of Values in Inquiry

From the rationalistic version, inquiry is value bound. In the Eastern evaluation paradigm, the evaluator avoids either/or in favor of both/and thinking. The evaluator avoids the common values used in projects such as effective or not effective, relevant, and not efficient and pursues new insights into the project of inquiry.

## THE MADE IN AFRICA EVALUATION PERSPECTIVE: A PARADIGMATIC LENS

At its biannual conference in 2007, the African Evaluation Association made the following resolutions:

- African evaluation standards and practices should be based on African values and worldviews.
- The existing body of knowledge on African values and worldviews should be central to guiding and shaping evaluation in Africa.
- There is a need to foster and develop the intellectual leadership and capacity within Africa and ensure that it plays a greater role in guiding and developing evaluation theories and practices.

These have become the background for the Made in Africa Evaluation (MAE) approach (Chilisa et al., 2017). The MAE is an attempt to identify and articulate how African philosophies, culture, history, belief systems, and contexts contribute to evaluation theory, practice, and methods. The contribution should include a deliberate effort at originating or developing completely new evaluation practices from within “*the continent*,” and “*uncovering practices that could inform the evolution of evaluation in the rest of the world*.” MAE is an evolving transdisciplinary concept that borrows from philosophers, researchers, policy analysts, development practitioners, linguists, evaluators, administrators, indigenous knowledge holders, and Western and non-Western literature to make explicit evaluation practices that are rooted in African cultures, development agenda, philosophies, worldviews, and a postcolonial indigenous paradigm. The MAE has become a concept that embraces African resistance to blind borrowing of Western values and standards to evaluate programs in Africa; capacity building of African policy analysts, researchers, and evaluators to carry out their own evaluation; adaptation of evaluation tools, instruments, strategies, and theory and model adjustment; and the development of evaluation practice, theory, and methodologies emanating from local cultures, indigenous knowledge systems, African philosophies, and African paradigms. MAE is a practice that has no boundaries between Africa and those from the rest of the world. It has no boundaries between knowledge systems; thus, it can be integrated or predominately African driven. It promotes global partnerships of knowledge systems and of evaluation actors and stakeholders. It seeks to stamp out decontextualized evaluation, while at the same time creating new African-informed evaluation strategies. In its most advanced form, it is predominantly informed by African worldview philosophies. Following are its core elements:

### 1. Goal and Purpose

Africans are to play a greater role in solving their own problems, thus questions on who initiates community programs and projects are essential. Using evaluation as a tool for development that contributes to the well-being of individuals, their relatives, others, and the environment to which they are connected is critical.

### 2. Methodology

There is need to adopt evaluation methodologies informed by a decolonization and indigenization intent, African worldviews, philosophies, and philosophical assumptions about the nature of relational ontologies, epistemologies, and axiologies:

- Choosing Holistic construction of evaluation knowledge to produce evidence
- Listening to metaphors on the environment that have a relationship to the project
- Valuing community knowledge and using it as a basis for further improvement and sustainability of project.
- Using both community set standards, stakeholders' standards, and donors' standards to evaluate worth and merit (Integrated approach)

### 3. Values

Core values are based on an *I/we* relationship. See Chapters 5. The emphasis is on belongingness, togetherness, interdependence, relationships, collectiveness, love, and harmony:

- Valuing community strength and building community relationships to inform evaluation intent, motive, and methodology
- Multicultural or social validity
- Fairness
- Reflexivity based on an *I/we* relationship
- Community as knowers and community as evaluators
- Evaluators and funding agents establishing long lasting relationships with communities

## DECOLONIZATION INTENT

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Among indigenous scholars, indigenous evaluation has a decolonization intent and explicitly names white privilege (Hopson, 2009; Kawakami, 2007). Elsewhere, we noted that decolonization of evaluation may be viewed as the restructuring of power relations in the global construction of evaluation knowledge production, such that the African

people may actively participate in the construction of what is evaluated, when it is evaluated, by whom, and with what methodologies (Chilisa et al., 2017). In this context, contextualized and culturally appropriate evaluation should be African-people-centered and value culturally relevant and indigenized evaluation processes and methodologies predominantly informed by African worldviews and paradigms. Decolonization calls for African resistance to blindly borrowing Western values and standards to evaluate programs in Africa; capacity building of African policy analysts, researchers, and evaluators to enable them to carry out their own evaluation; promoting adaptation of evaluation tools, instruments, strategies, and theory and model adjustment to ensure relevancy to African settings; and the development of novel evaluation practices, theory, and methodologies emanating from local cultures, indigenous knowledge systems, and African philosophies.

### Relational Ontology

As noted in Chapter 2, an African reality includes a spiritual and a material existence (Carroll, 2008). African ontology recognizes people's relation to the cosmos, an interdependent and interconnectedness that promotes peace, love, and harmony. The I/we relationship with its emphasis on a connection of human beings to nonliving things reminds us that evaluation of projects from the African perspective should include a holistic approach that links the project to the sustainability of the environment. All areas of culture, living experience, and indigenous knowledge systems must be utilized to conceptualize the realities to be evaluated and to come up with techniques through which these realities can be known. Evaluation of development programs in Africa should be about the contribution of projects to the quality and well-being of the people. From the everyday practice of the Africans, the well-being of relatives and those around, including things, is as important as one's well-being. Thus, an African will usually say he or she is not that well because a relative is not well.

### Relational Epistemology

The African epistemology is oriented toward an affect-symbolic-imagery such that an affective-oriented evaluator studies reality through the interaction of affect and symbolic imagery (Carroll, 2008). Emphasis is on the process and use of words, gestures, dance, song, rhythm, and well-established general beliefs, concepts, and theories of any particular people, which are stored in their language, practices, rituals, proverbs, revered traditions, myths, and folktales to access or convey meaning (Carroll, 2008). These modes of knowing are the basis for the design of methodologies for accessing a reality that has a connection with the knower and a means of verification of this reality. For example, an evaluation of the utilization of a clinic has to start with the space and place where the clinic is located. The evaluation has to access process and methods that enable the exploration of all the revered traditions and myths about the space and place in addition to counts of who visited the clinic and the reasons for the visits. What is critical is what informs the evaluation process, what the critical outcomes of evaluation are, and how reality can be accessed.

## Relational Axiology

The value system of most African societies is built around respect for others and oneself. There is emphasis on values grounded on cooperation, collective responsibilities, interdependence, and interpersonal relationships among people as the highest value (Carroll, 2008). From these principles, an ethical framework emerges with emphasis on accountable responsibilities of researchers and evaluators and respectful relationships between the researchers, evaluators, and the participants that take into account the participants' web of relationships with the living and the nonliving. African evaluators must hold themselves responsible for uncovering hidden, subtle, and racist theories that may be embedded in current methodologies, work to legitimize the centrality of African ideals and values as valid frames of reference for acquiring and examining data, and maintain inquiry rooted in strict interpretation of place. Community spirit, cooperation, collectiveness, democracy, and consensus building are the values espoused through a relational axiology (Chilisa, 2005). These value orientations also influence the evaluation theory of change, criteria or standards, indicators of success or failure of projects, and conclusions about the worth or merit of programs, policies, or projects.

*African Teleology.* There is a sense of directedness toward definite ends and definite purposes, which in turn compels commitment to a given goal. The implication for evaluation is that the evaluation inquiry must question the relevance and functionality of a program, project, or policy.

*African Logic.* The emphasis is on a diunital logic as opposed to the either/or logic common in Euro-American thought.

*African Identity.* The African Renaissance philosophy calls for a search for identity, a redefinition, and a re-evaluation of the self (and of Africa for that matter) in the context of a globalizing world (Makgoba, Shope, & Mazwai, 1999). Afrikanization seeks legitimacy for African scholarship embedded in the histories, experiences, ways of perceiving realities, and value systems of the African people (Msila, 2009). Afrikanization can thus be viewed as an empowerment tool directed toward the mental decolonization, liberation, and emancipation of Africans, so that they do not see themselves only as objects of research but also as producers of knowledge.

## Methodology

Carroll (2008) has proposed research methodology questions based on an African worldview that can be adapted to a relational-based evaluation inquiry. See Chapter 2. In an African relational-based evaluation methodology, evaluation questions are developed through consultation with participants or community. Evaluation participants are involved in identifying program evaluation goals and defining them based on the understanding or incorporation of the living and nonliving and collectively sharing their knowledge and life experiences and needs as a frame of reference. The evaluation process and the methods are targeted at building relationships between the evaluator and the evaluated; among the evaluated and among all stakeholders. The methods target the

advancement of communal interest and value and nurture community strength. It is important to understand the context and site and to collect a lot of information from the people about their values, beliefs, customs, spirituality, and general characteristics of their perceptual space. This perceptual space includes the living and nonliving. It is critical for the evaluator to understand that reality is not only on materialist ontology, but from an African perspective, nonmaterial things such as spirits, witches, sacred places, and the universe also form part of reality. In an African relational-based evaluation approach, there are multiple realities that need to be considered in the evaluation process. Knowledge is situational.

The targeted evaluation outcomes reflect the communal nature of Africans by concentrating on change for all as against change for individuals. As the community is actively involved in the evaluation process through scribes, the community helps the outsider evaluator regarding ways of how to collect data from the nonmaterial world. The evaluation processes reflect the African logic of circularity as opposed to the linearity logic of the traditional evaluation methods. The circular nature of the African logic represents the interdependence and interconnectedness between the universe and nature. By actively involving the African people from the beginning to the end of the evaluation process, thereby adopting participatory evaluation throughout, through these approaches the African people are no longer viewed as passive recipients of knowledge constructed on their behalf but rather people who can coproduce knowledge and own their knowledge. They can collect and interpret their own stories/narratives. Data are analyzed with the community or with the people who understand and can interpret the language, idioms, and proverbs of the local people. The process of building relationships throughout is as valuable as the evaluation outcome. Muwanga-Zake's study (2009) illustrates an evaluation practice informed by African worldviews. In the study, the Afrocentric paradigm and Ubuntu philosophy were combined with aspects of Western participative paradigms, namely postmodern, developmental, and constructivist evaluation paradigms to evaluate a computer educational program for teachers in South Africa.

### ACTIVITY 6.3

Read the following excerpt from Muwanga-Zake, J. W. F. (2009). *Discourse: Studies in the cultural politics of education: Building bridges across knowledge systems: Ubuntu and participative research paradigms in Bantu communities*. Discuss how an ubuntu-based validity concept informed a culturally and contextually indigenous evaluation process.

#### Setting the Evaluation Agenda

Muwanga-Zake (2009) engaged with the decolonization of evaluation research by moving the

focus from external determined program goals and objectives of the computer program to a focus on the agenda of the people, namely the teachers' values, needs, and priorities to be met by the program. For the teachers, a computer program would be a priority if it contributed to poverty alleviation and if it contributed toward learning leading to employment of learners. Using *Ubuntu* elements of collaboration, togetherness, cooperation, and consensus building, teachers were involved in the planning and execution of the

(Continued)

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evaluation. *Ubuntu* was used to inform a strategy of gaining access and achieving rapport with the participants. The strategy to gain entry into the research site is described as follows:

Greet *Bantu*, sit with them, understand their needs, and if possible, eat with them. In short, become a *Muntu* for full cooperation of *Bantu* in research (Muwanga-Zake, 2009, p. 418).

Becoming a *Muntu* is described as a method that involves evaluators being transformed and submitting themselves to *Ubuntu*. It is *Ubuntu*, for instance, to share with participants one's family, history, clan, and totem, and the participants' depth of knowledge of the evaluator determines the quantity and quality of indigenous knowledge accessed (Muwanga-Zake, 2009, p. 418). Through the application of *Ubuntu* and the I/we relationship, with emphasis on inclusiveness, a non-*Muntu* through transformation can become a *Muntu*. A *Muntu* evaluator can go through complete transformation by embracing generic African values and moving further to embrace the ethno philosophy dominant in a particular location.

#### Values, Validity, and Ubuntu

Muwanga-Zake (2009) takes concepts of validity discussed in the literature (Le compete

et al., 1993; Heron, 1996) and shows their application in the evaluation process from a *buntu* perspective.

**Technical Validity:** Fit between research questions, data collection procedures, interpretation of data, and reporting. The evaluator and the teachers engaged in a discourse analysis of *Ubuntu*, that is, understanding, for example, gestures, glances, thoughts, values, emotions, and attitudes and translating research questions between local languages and English.

**Psychosocial Validity:** The practice in the way the evaluation is carried out. *Ubuntu* social norms in gaining entry to a site and creating rapport were followed.

**Value Validity:** The contribution of research and intervention to personal and social transformation. The teachers' values and needs were prioritized, and teachers were trained in evaluation skills and became coevaluators. The teachers used the evaluation findings.

**Fairness:** Obtaining voice/a balanced representation of the multiple voices of all stakeholders. It was also an *Ubuntu* principle to recognize the elderly, spiritual leaders, chiefs, and other leadership around the school including those who were not participants.

## INDIGENOUS MULTICULTURAL VALIDITY

Kirkhart (2013) posits that validity is the mechanism through which we assess the cultural responsiveness of our evaluations. Placing culture at the center of the evaluation discourse and practice enables a debate and a reflection on evaluation rigor, evaluation ethics and standards, and evaluator competencies (Hood, Hopson, & Kirkhart, 2015). When researchers consider data analysis, there is always talk of validity. In indigenous evaluation, the interest is on the concept of indigenous or multicultural validity. It is an important concept that helps us to think through how data are collected, analyzed, reported, and disseminated.

- Validity also speaks to the question of whether the people feel that what has been produced is *relevant* to them, to their problems, and to their challenges. So, this sort of validity involves not only "this is what we found" but also responding to the question, "Is what I'm reporting still addressing what is relevant to the community and helpful to the community?" From an indigenous perspective,

when we start to acknowledge communities as arbitrators of quality, this brings validity (Chilisa & Denborough, 2019).

- Multicultural validity requires evaluators to communicate findings in a way that addresses the prioritized challenges of the community. Validity is therefore about relevance and resonance: how findings resonate with the culture of the people (Kirkhart, 2013).
- It requires culturally appropriate language and communication styles, culturally specific methods, and culturally specific measures validated with specific populations.
- It guards against methodological dissonance (standardized/predetermined measures, outcome indicators, and instruments) to evaluate programs that conflict with localized community and culture-specific practices.

Multicultural validity requires cultural appropriateness of measurement tools and cultural congruence of design configurations, quality of interactions between and among participants in the valuation process, and cultural congruence of theoretical perspectives underlying the program, the evaluation, and the validity assumptions (Kirkhart, 2013). The evaluation processes are, however, mediated by relational power that manifests among members of the evaluation, political agendas, discursive power that dictates what is considered a reality and truth, and historical experiences that shape the realities under review (Haugen & Chouinard, 2018). Hood et al.'s (2015) checklist to assess the cultural responsiveness of evaluations can be used along with Haugen and Chouinard's (2018) conceptual model of power in culturally responsive evaluation to interrogate multicultural validity of evaluation (see Table 6.5). Haugen and Chouinard's (2018) conceptual model of power in culturally responsive evaluation has four categories as follows:

- **Relational power:** It is power that manifests between evaluation members, for example, stakeholders who may be evaluation funders, community advisory board members, program managers, program participants, or evaluators. It is power that is also influenced by gender, class, ethnicity, or geographical location, for example, the north versus the south.
- **Political power:** Political agendas, for example, from governments or funders, and power structures within organizations may also impact the evaluation process and affect outcomes.
- **Discursive power:** Societal discourses may predetermine what counts as reality and truth. For example, certain evaluation tools and models dominate evaluation research in low- and middle-income countries
- **Historical power:** The historical context of a community, a program, a nation, or a continent is important in terms of understanding power dynamics that may cause tensions. For example, the marginalization of indigenous peoples' ways of knowing and a narrow focus on what culturally competence entails may cause tensions in evaluation of programs.



**TABLE 6.5** ■ Culture Checklist: Considerations to Improve the Multicultural Validity of Evaluation

Element	Content Description	Questions Raised	Questions Extended
<b>History</b>	History of place, people, program (or other evaluand), and evaluation's role. Knowledge of cultural heritages and traditions, including their evaluation over time.	<p>What is the story of this community?</p> <p>What is the story of how this program came to be in this place?</p> <p>How has what is here today been shaped by what came before it?</p> <p>What is the history of evaluation in this community or with this program?</p>	<p>What is the history of the place?</p> <p>What values need to be restored?</p>
<b>Location</b>	Recognizes multiple cultural intersections at individual, organizational, and systems levels. Cultural contexts and affiliations of evaluators and evaluand. Geographic anchors of culture in place.	<p>What are the cultural identifications of persons in the community, and how do these compare to those of the program staff and of the evaluators?</p> <p>What is valued here? How do people understand their lives? What is the geography of this place? How do people relate to the land?</p>	
<b>Power</b>	Understanding how privilege is attached to some cultural signifiers and prejudice to others. Attention to equity and social justice; avoid perpetuating discrimination, disparity, or condescension.	<p>Who holds power in various ways, and what are the impacts of how power is exercised?</p> <p>What are the formal, legal, political, social, and economic sources of power? What are the informal sources of power? Consider relational power, political discursive and historical temporal power (Haugen &amp; Chouinard, 2018).</p>	<p>Is the community empowered?</p> <p>Who owns the data? Where is the report? Does the community have access to the findings? Is it written in the language accessible to the community? How is the evaluation building local capacity? What is the strength of the community? What relational power manifests among members of the evaluation? Whose political agenda is valued? What is considered a reality? How do the historical experiences shape the beliefs and values of both participants and evaluators?</p>

political agenda is valued? What is considered a reality? How do the historical experiences shape the beliefs and values of both participants and evaluators?

<b>Voice</b>	Addresses whose perspectives are amplified and whose are silenced. Maps inclusion and exclusion or marginalization. Includes use of language, jargon, and communicative strategies.	Who participates in the planning, design, and implementation of the evaluation? Whose messages are heard and heeded? Whose methods of communication are reflected in the languages and expressions that are used to discuss the evaluation process, raise questions, interpret findings, and communicate results?	Who initiated the program?  Is the program relevant to needs and priorities of the community?
<b>Connection</b>	Connections among the evaluation, evaluand, and community. Relating evaluation to place, time, and universe. Maintaining accountability to community with respect and responsibility. Establishing trust in internal relationship.	How do members of the community relate to one another, to the program and its personnel, and to the evaluators? How do the evaluators relate to persons in the program and community? How does the evaluation relate to the core values of the cultures, community, and context?	How are indigenous and academic knowledge brought together?  What is the role of spirituality in the program? Has the evaluation created sound cohesion, harmony, and brought healing?
<b>Time</b>	Calling attention to rhythm, pace, and scheduling, to time both preceding and following evaluation. Directs attention to longer impacts and implications—positive or negative	How does the rhythm of this evaluation fit the context? Is it moving too fast? Too slow? Has it considered important outcomes at various points in time? Will it have the patience to watch carefully for small changes? For long-term consequences?	
<b>Return</b>	Attention to how the evaluation or the persons who conduct it return benefit to the evaluand and the surrounding community, both during and after the evaluation process.	How does evaluation advance the goals of the community or serve the needs of its people? Has the benefit returned to the community compensated them fairly for their time and attention or for any disruption created by this evaluation? In what ways are persons better off? Have any been harmed or disadvantaged?	What is the value added by the program? Does the program have any cultural and environmental significance? What is restored? What is revitalized?

(Continued)

TABLE 6.5 ■ (Continued)

Element	Content Description	Questions Raised	Questions Extended
<b>Plasticity</b>	The ability to be molded, to receive new information, recognize and change response to new experiences, and evolve new ideas. Applies both to evaluators and to their designs, process, and products.	How is the evaluation changing in response to local context? Are the evaluators staying open to new ideas, or are they overly committed to following a fixed plan or timeline? What has surprised them that changes how they think about evaluation? What have they learned about evaluation? What have they learned in this place that is new or changes their understanding of good evaluation?	
<b>Reflexivity</b>	Apply the principles of evaluation to one's own person and work. Self-scrutiny and reflective practice. Underscores the importance of meta-evaluation	What do I know in this context, and why? What do I know that I don't understand? What areas of new learning must I watch for and reflect upon? What do I need to let go of or relearn, and how can I work on that? What are the strengths and limitations of this evaluation and how it has addressed culture? How strong are the arguments supporting validity? What counterarguments challenge validity?	What community strengths has the evaluation elicited? What has the community learned?

Sources: Adapted from Hood, S., Hopson, R. K., & Kirkhart, K. (2015). Culturally responsive evaluation: Theory practice and future implications. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.), *Handbook of practical program evaluation* (pp. 218-31). Wiley Online Library; Kirkhart, K. E. (2013). Advancing considerations of culture and validity: Honoring the key evaluation checklist. In S. I. Donaldson (Ed.), *The future of evaluation in society: A tribute to Michael Scriven* (pp. 129-159). Greenwich, CT: Information Age; Haugen J., & Chouinard, J. (2018). Transparent, translucent, opaque: Exploring the dimensions of power in culturally responsive evaluation contexts. *American Evaluation Journal*, 1-10. Retrieved from <https://doi.org/10.1177/1098214018796342>.

## CONDUCTING AN INDIGENOUS EVALUATION

In the evaluation branch, context was proposed as a necessary branch that makes visible the unique epistemologies of the formerly colonized and historically marginalized communities. The nine considerations to improve the indigenous multicultural validity of evaluation can guide the evaluation process.

*Step 1: Paying Attention to Context.* Take the mosquito intervention presented in Activity 6.4 as an example of a project to be evaluated. The questions to be addressed at this early stage of evaluation can include the following:

1. Who initiated the program, and what role did the community play?
2. What are community stories about malaria prevention? What is the folklore about mosquitoes and malaria prevention?
3. What is the history of malaria prevention? Has there been any intervention program before?
4. What is the history of the community in relation to mosquito and malaria prevention?
5. What is the structure of the community, and how is power distributed and shared?
6. What role does spirituality play in malaria prevention?

*Step 2: Engaging the Stakeholders.* In the second stage, the evaluator should recruit stakeholders. The stakeholders should be representative of the intended beneficiaries of the project. It should be a group of people inclusive of persons directly and indirectly impacted by the project (Bowman, Francis, & Tyndall, 2015). At this point, it is critical to build rapport with the stakeholders and sustain healthy relationships with the group. This requires knowledge of community values, taboos, and how to gain entry into the community. Stakeholders can be the source of information for questions raised during the preparation stage.

*Step 3: Purpose of the Evaluation.* At this stage, the evaluator works with stakeholders to articulate what the community would consider as success for the project. In the historically marginalized and less developed countries, most of the programs/projects are externally funded. The evaluator should thus balance the funders' measurement of success with that of the community. Considering the mosquito net intervention, for example, the community might measure success or benefits by assessing the level of knowledge on malaria prevention, materials designed for the communities on mosquitoes and malaria prevention, and family roles and responsibilities in preventing malaria. Funders may request information on malaria deaths after and before the intervention, number of mosquito nets distributed, and how money was spent.

*Step 4: Evaluation Questions.* On the basis of the community and funders' views of what counts as success, the evaluator and the community frame the questions.

*Step 5: Evaluation Design.* An indigenous evaluation is informed by multiple methods embedded in indigenous epistemologies and draws from community stories, indigenous knowledge, languages, metaphors, folklores, philosophies, and worldviews and is inclusive of mainstream methodologies. Bowman and Dodge-Francis's (2018) blended culturally indigenous evaluation model is an example of how elements of an indigenous paradigm can be integrated with a Western paradigm to guide an indigenous evaluation.

*Step 6: Data Collection.* Indigenous tools, for example, songs, folklore, community stories, histories, legends, metaphors, and artifacts, are used to create an expansive context. Standard instruments based on mainstream epistemologies are adapted.

*Step 7: Data Analysis.* The findings have to be useful to the communities and to the funders. At this level, the focus should be on the products useful to the stakeholders. Using the mosquito net, for example, the communities might want to distill from the data stories that communicate community strength, harmony, and values and restore and revitalize those values that make communities responsible for themselves. This can be combined with other mainstream measures of success identified under the evaluation questions.

*Step 8: Report Writing.* Evaluators need to address questions of language and communication, ways in which the report can appeal to the physical, the emotional, the spiritual, the physical, and the cognitive.

*Step 9: Dissemination.* The dissemination procedures are tied to the products of the evaluation. You can imagine the production of reading materials for rural area pupils in primary schools on mosquitos, stories, folklore, histories of the community, malaria prevention, and so on. This could be useful to the community while the funders would want accountability on how the money was used and the reduction deaths caused by malaria.

The extract below is an example of a philanthropic program in Africa. Read it, and discuss the role of funded programs in development in the Global South and how the evaluation discipline can be reshaped so that projects serve the needs of the people.

#### ACTIVITY 6.4

Read the following excerpt from Sonia Shah, the author of *The Fever: How Malaria Has Ruled Humankind for 500,000 Years*, which will be published by Sarah Crichton Books/Farrar, Straus & Giroux in July 2019.

##### Malaria Mosquito Nets (Evaluation)

Last week, in honor of World Malaria Day, viewers of "American Idol" were urged to donate \$10 for an insecticide-treated bed net to save an African child from malaria, the mosquito-transmitted scourge

that infects about 300 million people every year, killing nearly 1 million. The premise behind the idea of treated nets is simple. The netting prevents malarial mosquitoes from biting people while they're asleep, and the insecticide kills and repels the insects. World health experts say that using the nets can reduce child mortality in malarial regions by 20%.

But even as donations roll in and millions of bed nets pile up in warehouses across Africa, aid agencies and nongovernmental organizations are quietly grappling with a problem: Data suggest that, at least in some places, nearly half of Africans who have access to the nets refuse to sleep under them. To date, millions of dollars from international agencies, NGOs, and USAID have been spent to get treated nets into the hands of impoverished, sub-Saharan Africans. The interagency Roll Back Malaria Partnership is calling for \$730 million more.

But, as even the staunchest advocate will admit, the treated nets were not designed with the cultural preferences of the rural African villager in mind. Among other design flaws, their tight mesh blocks ventilation, a serious problem in the hot, humid places where malaria roosts. Minor discomfort might be tolerable in rural African communities desperate for antimalarial prevention. But, as medical anthropologists have consistently found, because malaria is so common

in much of sub-Saharan Africa, and because the overwhelming majority of cases go away on their own, most rural Africans consider malaria a minor ailment, the way that Westerners might think of the cold or flu. Many rural people also believe that malaria is caused not just by mosquitoes but also by other factors such as mangos or hard work. As a result, while we see the treated nets as a lifesaving gift, they see them as a discomfort that provides only partial protection against a trivial illness. Is it any wonder that many use their nets to catch fish or as wedding veils or room dividers—all documented uses of insecticide-treated bed nets?

Perhaps what we need is a whole new approach. Instead of masterminding solutions for distant problems and then handing them down from on high—as we do not just in our antimalaria efforts but in a variety of aid programs aimed at extreme poverty—we should empower the poor to come up with their own solutions and then help figure out how to implement them. Such a process might not lead to grand, magic-bullet solutions. More likely, we'd get microsolutions, variable from locale to locale, from village to village. But we'd be supporting self-reliance and building goodwill along the way. And we'd surely avoid the wastefulness—and really, the affront—of befuddling communities with “gifts” that many neither want nor use.

## ACTIVITY 6.5

Read an extract of the hypothetical water project, and apply an indigenous approach to evaluate the program by addressing the evaluation steps in table 6.5. Use the culture checklist to address each step.

Compare and contrast the procedures with a conventional evaluation using the logical frame.

### The Water Project

Development workers identified an impoverished peripheral community with poor access

to water. A donor agency contracted an NGO to develop and deliver water supplies. The local government authority considered the project to be valuable. The logic frame reiterated the overarching goal as contributing to alleviating poverty through enhanced health, resulting from improved water supply. The outputs contributing to achieving this purpose were improved access to better-quality water, the establishment of a water users' committee, and a sustainable

*[Continued]*

(Continued)

system of maintenance by community members to support water delivery. Specific and verifiable activities included enclosing and fencing off a spring on a nearby hill; constructing two large

water-storage tanks; laying pipes with taps to 50 household clusters; and employing a part-time maintenance officer to keep everything in working order.

1. Preparing for the evaluation	
2. Identifying and creating rapport with stakeholders	
3. Purpose and goal of the evaluation	
4. The evaluation approach	
5. Evaluation tools, methods, and success indicators	
6. Data collection	
7. Analysis and interpretation	
8. Report writing	
9. Dissemination	

### ACTIVITY 6.6

The evaluation tree metaphor has a needs/aspiration context branch. Do a literature search on indigenous evaluation and extend the branch

with indigenous evaluation scholars. Discuss their evaluation frameworks and models and debate how they can be adapted to your contexts.

## SUMMARY

The use of inappropriate evaluation frameworks, tools, and methods among indigenous nations and developing countries driven by Western thought has led to evaluations findings that do not capture program outcomes and program benefits that are meaningful to the people. Evaluation theories and frameworks, measurement tools, outcome indicators, and dissemination of results should be adapted to be contextually appropriate and congruent with the needs, experiences, and culture of the people. Indigenous scholars are calling for a shift from evaluation that only assesses implementation and outcomes

of programs to evaluation that considers the initiators of programs so that communities can own solutions to their challenges. Indigenous scholars are envisioning evaluation frameworks, concepts, tools, and checklists based on their philosophies and cultures that evaluators can use to make evaluation contextual, culturally appropriate, and relevant to the needs of the people.

### Key Points

- Indigenous evaluation deserves a branch in the evaluation tree metaphor that makes visible indigenous evaluation frameworks and indigenous scholars.
- Mainstream evaluation's preoccupation with cultural competence fails to address broader issues of indigenous peoples' struggles for sovereignty, self-determination, needs and aspirations, and efforts to decolonize evaluation.
- Context and culture matter in evaluation.
- Indigenous evaluation should adopt a context-first approach.
- Relational power and political, discursive, and historical temporal power mediate validity issues and should be interrogated when assessing rigor in indigenous evaluation.

### Suggested Readings

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# 7

## DECOLONIZING MIXED METHODS RESEARCH

As long as the knowledge that is traded across boundary does not happen among equals, that is western researchers and indigenous researchers, the legacy of colonialism continues.

**Louis Botha** (2011, p. 32)

Social science knowledge about a small nation in the hands of a big power is a potentially dangerous weapon. It contributes to the asymmetric patterns already existing in the world because it contributes to manipulation in the interests of big powers.

**Johan Galtung** (1967, p. 14)

### **Overview**

The decolonization of research methodologies literature continues to critique the marginalization of local indigenous knowledge and call for integration of indigenous research with Western-driven research. The international community of researchers is inviting us to challenge the conventional thinking of seeing mixed methods research (MMR) as mixing the dichotomy of methods that are either quantitative or qualitative and to focus more on integration of knowledge systems. Jon and Williams-Mozley (2012) ask what MMR would look like if rather than focusing on the mixing of conventional qualitative and quantitative methods, MMR was conceptualized along the idea of integrating nonindigenous and indigenous approaches or methods. This chapter gives an overview of the characteristics of MMR under the five paradigms discussed



in this book, namely postpositivist, constructivist, pragmatist, transformative, and indigenous paradigms. The multiple definitions of MMR, the rationale and designs, and three examples of indigenous MMR are presented. Indigenous mixed methods focus on mixing the quantitative, qualitative, and indigenous research paradigms. The main argument in this chapter is that indigenous and Western knowledge should be integrated to acknowledge and enhance participation of indigenous peoples as knowers and creators of their own destinies, to increase the relevance of research to their needs, to enhance rigor in the research process, and to disseminate research findings in ways appropriate for both academic and community settings. The following were noted in Chapter 6 and should guide perspectives on indigenous mixed methods:

- A methodology separated from its overarching paradigm is not sufficient for decolonization (Held, 2019; Kovach, 2009; Wilson, 2008). Thus, there is need to locate indigenous research in its own paradigmatic space.
- Within a generic relational indigenous paradigm are worldviews specific to the histories, experiences, and cultural beliefs and practices of indigenous peoples. Context specific methodologies should guide research processes.

## LEARNING OBJECTIVES

By the end of this chapter you should be able to do the following:

1. Compare and contrast the characteristics of MMR under the five paradigms, and justify the choice you would make to inform the design of your study.
2. Discuss the definitions and rationale for MMR presented by the multiple scholars, and justify the choice of definitions and rationales that resonate with your worldview.
3. Discuss the features of an indigenous mixed methods study.
4. Comprehend and apply indigenous mixed methods approaches to research.

### *Before You Start*

- Debate the Louis Botha quotation provided in the opening of this chapter, and discuss ways in which indigenous and nonindigenous knowledge and practices can be integrated on equal terms.
-

## TOWARD THE MEANING OF MMR

A review of definitions of MMR (Plano Clark & Ivankova, 2016) revealed 10 definitions of MMR. These definitions fall into six categories: (1) an emphasis on method (Greene, Caracelli, & Graham, 1989; Morgan, 2014a; Morse & Niehaus, 2009); (2) a focus on methodology (Creswell, Klassen, Plano Clark, & Smith, 2011; Tashakkori & Creswell, 2007); (3) a focus on method and methodology (Creswell & Plano Clark, 2011); (4) methodology and philosophy (Johnson, Onwuegbuzie, & Turner, 2007); (5) a philosophy perspective (Greene, 2007); and (6) a community of research practice perspective (Teddlie & Tashakkori, 2009). A seventh category proposes the integration of indigenous research and Western-based research (Chatwood et al., 2015; Chilisa & Tsheko, 2014; Hutchinson et al., 2014). Table 7.1 regroups the definitions into four categories.

The majority of the definitions emphasize mixing of mainstream qualitative research methodologies and methods with mainstream quantitative methodologies and methods. Where does this leave indigenous research? What is quantitative research, and what is qualitative research? Walter and Andersen (2013) on the definition of mainstream quantitative methodology note that it is defined in terms of the characteristics that make it different from qualitative research. They note,

The methodological practice of such quantitative research failed, and fails, to recognize its own culturally and racially situated origins and, more particularly, its contemporary dominant and racial parameters. (p. 43)

The Porteus Maze in Chapter 3 and the logical framework discussed in Chapter 6 clearly revealed the biases in the tools that define constructs to be quantified. Indigenous quantitative methodologies are defined as methodologies within which the practices and the processes of the research are conceived and framed through an indigenous standpoint, informed by an indigenous ontology, epistemology, and axiology (Walter & Andersen, 2013, p. 83).

In Chapter 3, it was noted that the anthropologists with their qualitative culture-collection methods reduced Africans to a childlike race, passive onlookers caught up in sorcery and stagnation. In Chapter 2, it was noted that an indigenous plant, with an indigenous name, once it entered the academic laboratories, lost its name and character, assuming new ownership under a different name, never again to be recognized by the indigenous community from which it came. The culture-collection methods included taking human beings for observation. In Botswana, the El Negro demonstrates clearly the culture-collecting methods. El Negro is the remains of a chief whose body was stolen from its grave by two brothers, Jules and Eduoard Verraux, on the night after he was buried. They took the body to France in 1830. The body was sold to Francesco Darder, who deposited it in the museum in Banyole north of Barcelona in Spain. There, the body represented all “negro” people and became a symbol of Spanish exploitation and enslavement of black Africans. It was removed from public exhibition in 1997 after protests by Africans and people of African ancestry, and later repatriated to Africa where it was reburied in Gaborone, the capital of Botswana, on October 5, 2000 (Chilisa & Preece 2005).

These observations invite us to think seriously about our framing of and naming of mixed methods in indigenous research. Will indigenous quantitative and qualitative methods and methodologies not lose their meaning and get lost when we subsume them under mainstream paradigms? In this book, mixed methods research is defined within the philosophical frames of an indigenous paradigm. See Table 7.1.

TABLE 7.1 ■ Review of Definitions of Mixed Methods Research

Methodologies and Methods	Philosophy	Communities	Paradigm Focus
<p>Greene, Caracelli, &amp; Graham (1989)</p> <p>"We defined mixed-method designs as those that include at least one quantitative method (designed to collect numbers) and one qualitative method (designed to collect words), where neither type of method is inherently linked to any particular inquiry paradigm." (p. 256)</p>	<p>Greene (2007)</p> <p>"The core meaning of mixing methods in social inquiry is to invite multiple mental models into the same inquiry space for purposes of respectful conversation, dialogue and learning one from the other, toward a collective generation of better understanding of the phenomena being studied. By definition, then, mixed methods social inquiry involves a plurality of philosophical paradigms, theoretical assumptions, methodological traditions, data gathering and analysis techniques, and personalized understandings and value commitments—because these are stuff of mental models." (p. 13)</p>	<p>Teddlie &amp; Tashakkori (2009)</p> <p>"We refer to [mixed methods research] as the third research community in this chapter because we are focusing on the relationships that exist within and among the three major groups that are currently doing research in the social and behavioural sciences. Mixed methods (MM) research has emerged as an alternative to the dichotomy of qualitative (QUAL) and quantitative (QUAN) traditions during the past 20 years." (p. 4)</p>	<p>Chatwood et al. (2015)</p> <p>propose a definition of MMR that considers methodologies of combining Western and indigenous knowledge as distinct paradigms in indigenous research.</p>
<p>Johnson &amp; Onwuegbuzie (2004)</p> <p>"Mixed methods research is formally defined here as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study."</p>	<p>Blackstock (2009)</p> <p>When the spiritual, the emotional, the physical and the cognitive are brought together with a Western quantitative approach, Blackstock calls the approach "enveloping quantitative research in an indigenous envelope" and does not use the term mixed methods.</p>		<p>Chilisa &amp; Tsheko (2014)</p> <p>Qualitative methods with qualitative data emanating from an indigenous paradigmatic lens in a single study or multiple phases;</p> <p>The indigenous mixed methods also takes the form of combining quantitative and qualitative methods and indigenous research frameworks in a single or multiphase study.</p>

or language into a single study.

and does not use the term mixed methods.

methods also takes the form of combining quantitative and qualitative methods and indigenous research frameworks in a single or multiphase study.

<p>Creswell &amp; Plano Clark (2007)</p> <p>"Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analyzing and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone." (p. 5)</p>			<p>Jon &amp; Williams-Mozley, 2012</p> <p>Mixed methods are defined as mixing indigenous and non-indigenous paradigms or methods.</p>
<p>Tashakkori &amp; Creswell (2007)</p> <p>"As an effort to be as inclusive as possible, we have broadly defined mixed methods here as research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a program of inquiry." (p. 4)</p>			<p>Botha (2011)</p> <p>Considers as mixed methods combining conventional qualitative research with indigenous research. The purpose for mixing is to draw on the interaction of these methods to clarify the relationship between Western research and indigenous ways of knowing so that more appropriate theories, practices, and relations can be developed for their interrelation. (p. 314)</p>

(Continued)

TABLE 7.1 ■ (Continued)

Methodologies and Methods	Philosophy	Communities	Paradigm Focus
<p>Johnson, Onwuegbuzie, &amp; Turner (2007)</p> <p>"Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative viewpoints, data collection, analysis, inference techniques for the broad purposes of breadth and depth of understanding and corroboration." (p. 123)</p>			
<p>Morse &amp; Niehaus (2009)</p> <p>"Mixed method research is therefore a systematic way of using two or more research methods to answer a single research question." (p. 9)</p>			
<p>Creswell, Klassen, Plano Clark, &amp; Smith (2011)</p> <p>"For purposes of this discussion, mixed methods research will be defined as a research approach or methodology:</p> <ul style="list-style-type: none"> <li>• Focusing on research questions that call for real-life contextual understandings, multi-level perspectives, and cultural influences;</li> <li>• Employing rigorous quantitative research assessing magnitude and frequency of constructs and rigorous qualitative research exploring the meaning and understanding of construct;</li> <li>• Utilizing multiple methods (e.g., intervention trials and in-depth interviews);</li> </ul>			

• Utilizing multiple methods (e.g., intervention trials and in-depth interviews);

- Intentionally integrating or combining these methods to draw on the strength of each; and framing the investigation within philosophical and theoretical positions.” (p. 4)

Morgan (2014)

Mixed methods research designs are “projects that collect both qualitative and quantitative data so that using the combined strengths of qualitative and quantitative methods will accomplish more than would have been possible with one method alone.” (p. xiii)

Adapted from: Plano Clark, V. L., & Ivankova, N. V. (2016). *Mixed methods research—A guide to the field*. London, UK: Sage.



## Paradigms in MMR

There are recommendations to teach MMR according to philosophical frames of postpositivism, constructivism, pragmatism, transformation, dialectical pluralism, realism, and critical realism (Mertens et al., 2016). Romm (2018) proposes philosophical frameworks on MMR guided by the postpositivist, constructivist, and pragmatist, transformative, and indigenous paradigms. When paradigms are used to frame the methodology, the following questions are asked:

- What are the ways of perceiving reality?
- What are the ways of knowing?
- What are the ethical values that inform the way the research is conceived, the way questions are asked, the way the study is conducted, the way the analysis is done, and how results reported?

In line with the paradigms discussed in this book, characteristics and illustrations of the MMR within these paradigms are discussed.

### Postpositivist

The postpositivist theory uses multiple and/or mixed methods to compare research results against other observations and results. Triangulation is not necessarily the goal of the mixing. Multiple methods or mixed methods are used to tap into different aspects of realities. The different facts or knowledge may not necessarily converge. The idea is to view knowledge as vast and impressive and our ignorance as boundless and overwhelming; consequently, we are forever moving frontiers of knowledge (Popper, 1994; Romm, 2018). Hunter and Brewer (2015) classify the approach as postpositivist because of its alignment with Popper's stance. In line with Popper's (1994) stance, the focus of research is to convince the reader that the findings are plausible. There is no preference of MMR over a mono method. The contention is that the value of the methodology depends on the extent to which it is convincing, valid, and closer to existing reality. The main contention is that we can never know the extent to which we are closer to an existing external reality. Quantitatively and qualitatively directed measurements and modes of analysis are thus used for purposes of understanding (Hunter & Brewer, 2015) or for purposes of making policy recommendations.

### Constructivist

The constructivist MMR is guided by an ontological stance that perceives reality as multiple and an epistemological assumption where knowledge is perceived as subjective (Hesse-Biber, 2010). The question is how to present reality that captures the multiple voices of the participants. MMR from a constructivist stance is therefore qualitatively driven (Hesse-Biber, 2010) and action oriented (Denzin & Lincoln, 2003). The use of MMR should thus include the role of the researcher as a responsible healer who should take action to address issues emerging from his or her interaction with the participants (Romm, 2018).

In a national study on gendered school experiences, access, achievement, and retention in junior secondary schools, the researchers started with a trend analysis on subject enrollment by gender. The data were analyzed, and subjects that showed disparities of access by gender were selected. Further analysis was conducted to determine gender differences in achievement. This was followed by a qualitative research design that used focus group interviews, individual interviews, classroom observations, folklores, songs, and proverbs explaining gendered roles that inform subject choice and participation in class. There was, for example, an overrepresentation of girls in home economics and moral education classes. There was also a tendency to punish boys harshly when girls did better than them.

In this study, the quantitative approach was used to select the subjects where gendered access, equity, and achievement were apparent and to study these to understand the multiple realities from students, teachers, and school administrators and other realities communicated through the environment, the playground, school uniform, corporal punishment, classroom arrangement, naming of girls and boys, and school chores.

### Transformative

In the transformative paradigm, the method or methods used are not as important as how they are used to advocate for social change and advance social justice. Multimethods and mixed methods are nevertheless suited for research in the transformative paradigm.

### Pragmatist

The pragmatist paradigm is understood as the use of qualitative and quantitative viewpoints for data collection and analysis for the broad purposes of breadth and depth of understanding and corroboration. The aim is therefore to develop corroboration or breadth of findings. The focus is on the research question and how different methods can be employed to answer this question. The question asked should lead to answering it through the use of quantitative or qualitative data collection and interpretation. The approach has been critiqued as too simplistic and failing to consider questions such as who defines the research questions and on the methods that work.

### Indigenous Paradigms

Indigenous paradigms seek to combine perspectives from this lens with nonindigenous paradigmatic perspectives. The mixed method approach takes the form of combining indigenous quantitative and qualitative methods and methodologies with nonindigenous methods and methodologies under an indigenous worldview or paradigm. It is more in line with Greene's definition of mixing as bringing together multiple philosophies and paradigms to guide the research. It nevertheless privileges indigenous knowledge as the dominant paradigmatic lens that informs the mixing. It provides knowledge pathways in the form of the physical, the emotional, the cognitive, and the spiritual that can appeal to the ways of knowing of indigenous communities when indigenous qualitative and quantitative methods are allowed to mix with mainstream quantitative and qualitative methodologies. This chapter illustrates perspectives of indigenous mixed methods research.

## MIXED METHODS DESIGNS AND RATIONALES

Choosing the mixed method research paradigm that informs a study is an essential step in designing the study. The choice should also be guided by the rationale for mixing methods. Plano Clark and Ivankova (2016) have suggested six typologies for mixing methods. We add a seventh typology derived from studies that integrate indigenous paradigms with Western paradigms. What is clear from the literature is that there is often more than one reason for mixing methods (see Table 7.2, pp. 162–165). The six typologies by Plano Clark and Ivankova (2016) focus more on techniques and methods with an underlying assumption of neutrality of methods, techniques, and procedures. The rationale for mixing with an indigenous paradigmatic lens hinges on questions of equality of knowledge systems and addressing relational, political, discursive, and historical power that dominates research about the “other” (Haugen & Chouinard, 2018). Refer back to Chapter 6.

Choosing the paradigm and formulating the rationale for mixing methods also goes along with the choice of the mixed methods designs. We can distinguish between concurrent mixed methods designs, sequential mixed methods designs, and multiphase designs (Nastasi & Hitchcock, 2016; Plano Clark & Ivankova, 2016). A multiphase design that uses an indigenous paradigmatic lens is described in Chapter 8.

*Predominantly Qualitative Concurrent Designs.* In this design, the study derives its philosophical assumptions from a constructivist paradigm and therefore values the social construction of knowledge. The study is predominantly qualitative and uses the quantitative approach to enhance understanding of the qualitative findings.

*Predominantly Quantitative Concurrent Designs.* The study derives its philosophical assumptions from a postpositivist paradigm and its quest for objective truth. The qualitative research is used to enhance understanding of the quantitative findings.

*Sequential Designs.* Equal weight is given to both quantitative and qualitative methods. The approach is driven by a pragmatist view with a focus on how best to address each of the research questions posed by the study.

### ACTIVITY 7.1

Activity 7.1 presents a study that uses a sequential mixed methods design. Read it, and answer the following questions:

1. Describe the sequential mixed methods design presented in the study.
2. How was quantitative data used?
3. What was the rationale for the mixed methods design used?
4. Discuss the strengths and weaknesses of the methodology used.
5. In which paradigm do you situate the study?

### **GENDERED SCHOOL EXPERIENCES: THE IMPACT ON RETENTION AND ACHIEVEMENT IN BOTSWANA AND GHANA**

#### **Purpose of the Study**

The research focused on the gendering of the school environment and the ways in which this influenced school outcomes in selected case study schools. The school data were used to connect and qualify the national statistical data on access, retention, and achievement with the everyday experience of females and males in these schools. In this way, by finding out why such differences in achievement were produced, the study was able to enhance qualitative understandings of a range of local contexts that were only broadly described by national survey data. The research also looked at teachers and students simultaneously to reveal the ways in which the gendered school environment impacted them differentially.

#### **Methodology**

The study draws on both qualitative and quantitative data. The qualitative dimension of the research was a response to the lack of ethnographic studies, especially with a comparative dimension, to explain why and how differing patterns of achievement are produced. Data were collected by the in-country research team through a number of methods such as

questionnaires, interviews, observations, and focus groups. These data collection methods were used mostly in relation to the students and teachers of the chosen classes. This was supplemented by school-level observations, informal conversations, and descriptions of critical incidents.

The quantitative dimension of the research employed existing national statistical data on access, retention, and achievement to promote understanding of the ways in which national trends in educational participation are produced at the microlevel. National level statistical data were collected to contextualize the ethnographic case studies, providing the backdrop for a detailed analysis of the way in which gender influences retention and achievement at the school level.

#### **Sampling**

In each country, a team of three researchers carried out empirical work in six coeducational state day schools in the junior secondary sector. Two of the schools were located in urban areas, two in peri-urban areas, and two in rural areas. The country sample of six thus comprised three relatively high-achieving schools and three relatively low-achieving, one of each within the three locations. Within each country research team, each of the three researchers was responsible for two schools, making a total of six cases in each country.

## **INDIGENOUS MIXED METHODS APPROACHES**

Three indigenous mixed methods approaches are illustrated: combining indigenous research with qualitative and quantitative methods (Chatwood et al., 2015), enveloping a quantitative research in an indigenous envelope, and combining conventional qualitative research with qualitative indigenous methods.

### **Quantitative Western Knowledge, Qualitative Western Knowledge + Indigenous Knowledge**

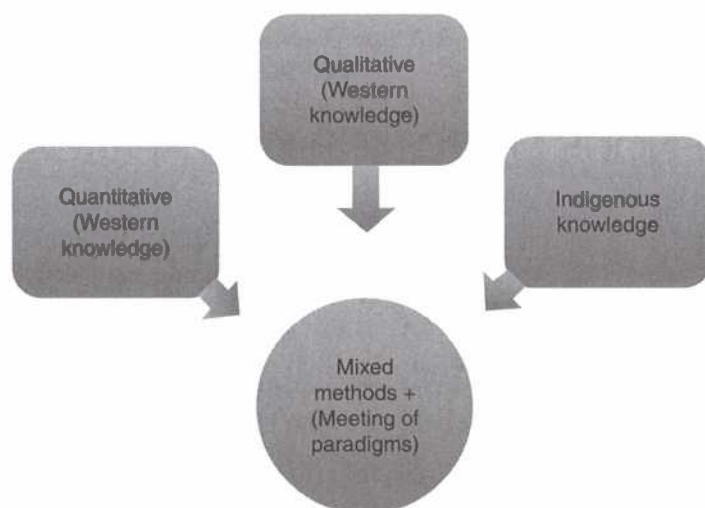
Chatwood et al. (2015) propose a definition of MMR that considers methodologies of combining Western and indigenous knowledge as distinct paradigms in indigenous

research. Mixed methods research (MMR) is the mixing of paradigms, where Western quantitative and qualitative knowledge is combined with indigenous knowledge. Indigenous research is defined as that which is built on indigenous theorizing of knowledge (Chatwood et al., 2015). It is research that applies indigenous ontological, epistemological, and appropriate methodologies in the research process. When research is not conceptualized along indigenous research frameworks, what passes for indigenous research tends to be methods of data collection and analysis conducted and represented in modified hegemonic Western traditions (Kovach, 2009). Of value is the indigenous research framework and/or philosophical assumptions emanating from indigenous worldviews that guide the research. The diagram in Figure 7.1 illustrates Chatwood et al.'s (2015) conceptualization of MMR. Chatwood et al. (2015) note,

The inclusion of indigenous knowledge and scholarship in the field of inquiry, with framing as a mixed method, introduces another research paradigm in that it honors a common set of beliefs, values and assumptions that a community holds in common. (p. 3)

Chatwood et al. (2015) describe as mixed method a research inquiry that combines quantitative and qualitative methods based on Western ways of knowing with indigenous knowledge underpinned by an indigenous paradigm. This way of defining mixed methods is grounded in Greene's (2007, p. 13) definition where emphasis is on the "plurality of paradigms, theoretical assumptions, and methodological traditions to inform a respectful dialogue among equals seeking to know." Chatwood et al. (2015) describe the approach as a methodology that recognizes indigenous knowledge as a distinct relational paradigm that is mixed with Western-based quantitative and qualitative research

**FIGURE 7.1** ■ Quantitative, Qualitative, and Indigenous Research



paradigms. The mixing is grounded in an indigenous standpoint to decolonize research and ground it in indigenous epistemological, theoretical, and methodological underpinnings. The mixed method is built on the principles of two-eyed seeing, which has become an important indigenous concept integrating indigenous and Western ways of knowing on equal footing.

### Embedded Transformative Emergent Mixed Method Design

In their study, Chatwood et al. (2015) explored the values underlying health system stewardship through a collaborative consensus-based approach with indigenous scholars and knowledge holders. The focus was on identifying indigenous values that underlie health system stewardship. The transformative research paradigm, with its emphasis on social justice and culturally responsive research principles, formed part of the framing of the study. The study had a decolonization intent, and the two-eyed principle informed the study. In Chapter 2, two-eyed seeing developed by Albert Marshall, a Mi'kmaw elder, was presented as a model to view the world through the lens of Western and indigenous knowledge systems for the benefit of all.

### The Nominal Group and Embedded Traditional Knowledge

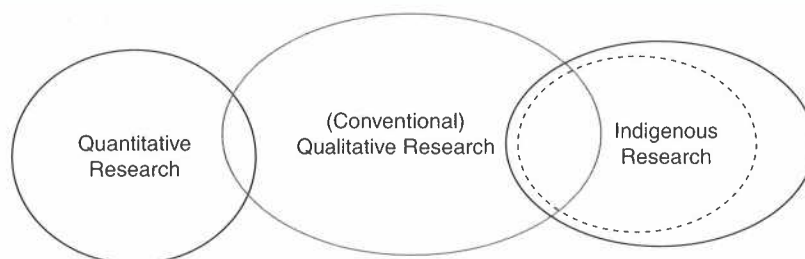
Indigenous research requires participants to participate in formulating the research questions, methodology, data analysis, and dissemination strategies. In the study, the nominal group process allowed the indigenous knowledge holders and scholars to engage in the formulation of research questions with Western researchers through an iterative process. The process started with participants working independently to identify values they considered important in stewardship, sharing the values and agreeing on emergent themes. Indigenous knowledge holders and scholars illustrated their themes with stories, photographs, and films. Another important step was to produce a research output that would be respectful of the paradigms within the mixed methods approach. Field-based and narratives approaches were considered appropriate and conducive to capturing indigenous knowledge. Research team members with expertise transferring traditional knowledge through media prepared the film that was disseminated to a large number of stakeholders.

### Conventional Qualitative Research + Qualitative Indigenous Research

Botha (2011) considers as mixed methods combining conventional qualitative research with indigenous research. The purpose for mixing is to draw on the interaction of these methods to clarify the relationship between Western research and indigenous ways of knowing so that more appropriate theories, practices, and relations can be developed for their interrelation (Botha, 2011, p. 314).

Figure 7.2 illustrates Botha's conceptualization of mixing methods. The diagram illustrates how indigenous methods are drawn from within conventional qualitative research. For instance, Chapter 11 discusses decolonizing the interview method, which feminists view as a masculine paradigm that excludes traits viewed as feminine, such as sensitivity and emotionality (Fontana & Frey, 2005). Other methods, for example, storytelling and interpretation of texts and artwork (Denzin & Lincoln, 2003), are common in qualitative

FIGURE 7.2 ■ Conceptualization of Mixing Methods



research. Botha (2011) notes that the indigenous research that overlaps with conventional qualitative research embraces critical theorists and creative analytical practice ethnographers engaged in decolonizing and innovative methods of research with other indigenous scholars. This on the diagram is the area represented by the dashed circle. The solid outer circle of the indigenous research shows more qualitative and indigenous methods that have a different and clearer relationship to conventional qualitative research. The mixing of conventional and indigenous research thus goes beyond finding a middle ground between the two, to developing new indigenous methodologies. It is a mixed methods project that attempts to counteract appropriation of indigenous knowledge and create space for new qualitative indigenous methods.

Botha's (2011) conceptualization of mixed methods is driven by Greene's (2007) definition where

mixed methods social inquiry involves a plurality of philosophical paradigms, theoretical assumptions, methodological traditions, data gathering and analysis techniques and personalized value commitments. (p. 134)

The definition emphasizes a philosophical perspective (Plano Clark & Ivankova, 2016). Botha outlines three purposes proposed by Greene (1989) for which the proposed mixed method can be used. The mixing is done for purposes of development, where results from one method inform the other method to increase the validity of constructs; initiation to discover paradoxes and contradictions and increase the breadth and depth of inquiry results; and expansion to extend the breadth and range of inquiry to increase the scope of inquiry. Refer to Table 7.2 on Plano Clark and Ivankova on purposes for mixed methods designs.

Botha (2011) frames the mixing of indigenous research with conventional methods by applying the principles of reflexivity. Reflexivity has become an important concept for integrating indigenous and Western knowledge systems and reconciling social science research approaches (Levac et al., 2018). Reflexivity allows researchers to interrogate their positions within existing power. Researchers reflect on what they know, how they know it, their ways of knowing, and which questions they consider important to ask. Of importance in mixing the indigenous and conventional qualitative methods is the knowledge that gets subjugated through the conventional qualitative approach and what new indigenous methods can contribute to communicating the realities of the subjugated

voices. Botha (2011) used a set of traditional ethnographic methods of data collection consisting of recorded and participant observation to obtain emic and etic perspectives of cultural practices and ways of knowing in a rural village in Eastern Cape of South Africa. He notes,

The interviews along with the aid of my research diary, photographs and other material became audio and visual cues that formed the basis for an alternative inquiry process. (p. 317)

Botha (2011) describes this alternative inquiry as a process of creating texts that came from the practical, the cognitive, and emotional experiences he went through. The reflexive practices were aligned to the “ethical and relational ways of knowing.” Relationality in indigenous research methodologies emphasize the interdependence and interconnectiveness of all creation where the cognitive, the physical, the emotions, and the spiritual coexist. Creative exploration, through intuitive, experiential practice and verbal representation framed by a decolonizing agenda and a relational indigenous methodology, led to an indigenous reflexive method. I have added the reflexive method to Botha’s initial diagram.

Clearly then, the community of scholars writing on indigenous research methodologies consider mixed methods as combining qualitative indigenous research with Western qualitative research (Botha, 2011; Chilisa & Tsheko, 2014) and/or combining indigenous research with qualitative and quantitative methods (Chatwood et al., 2015; Chilisa & Tsheko, 2014; Hutchinson, 2014).

### Quantitative Research + An Indigenous Worldview

When the spiritual, the emotional, the physical, and the cognitive are brought together with a Western quantitative approach, Blackstock (2009) calls the approach “enveloping quantitative research in an indigenous envelope” and does not use the term *mixed methods*. Enveloping quantitative research in an indigenous envelope is presented as an important aspect of integrating indigenous and Western knowledge for the benefit of indigenous communities.

In this approach, conventional quantitative research findings are expressed within the framework of a First Nations worldview represented by the Medicine Wheel. The mixing of conventional quantitative research happens at the presentation of quantitative research findings. The approach has a clearer relationship to quantitative research and constitutes a new way of linking conventional quantitative research to indigenous research.

The rationale for mixed methods research under an indigenous paradigm are summarized in Table 7.2. MMR has a decolonization intent and seeks ways to bring together Western and indigenous knowledge on equal footing to explore multiple perspectives and dimensions of a phenomenon. These multiple perspectives and dimensions emanate from an understanding of interconnected reality across time and space that is the foundation of a complex world where animals, the living, and the nonliving live in harmony, and human experience and endeavor is achieved through a balance between the spiritual, emotional, physical, and cognitive dimensions (Blackstock, 2009, p. 138).



**TABLE 7.2 ■ Mixed Method Research Rationales by Author**

Mixed Methods Research Rationales	Indigenous Mixed Methods Rationale
<p>Reichardt &amp; Cook (1997)</p> <ol style="list-style-type: none"> <li>1. <b>Multipurpose</b> (to examine both processes and outcomes)</li> <li>2. <b>Each method type building upon the other</b> (to use the knowledge gained from one method to benefit and complement the other)</li> <li>3. <b>Triangulation through converging operations</b> (to correct for biases present in each method)</li> </ol>	<p>Botha (2011)</p> <ol style="list-style-type: none"> <li>1. <b>Initiation</b> (to initiate new ways of grounding methodologies at the local level)</li> <li>2. <b>Development</b> (to develop new theories, values, and practices that inform indigenous research)</li> <li>3. <b>Expansion</b> (to decolonize the areas of collaboration between indigenous and Western modes of qualitative research, reveal new perspectives, and expand the boundaries of qualitative ways of knowing)</li> </ol>
<p>Greene, Carecelli, &amp; Graham (1989)</p> <ol style="list-style-type: none"> <li>1. <b>Triangulation</b> (to increase the validity of results by converging and corroborating results from the different methods)</li> <li>2. <b>Complementarity</b> (to increase the interpretability and meaningfulness of results by elaborating, enhancing, illustrating, and clarifying results from one method with the results from the other method)</li> <li>3. <b>Development</b> (to increase the validity of results by using the results from one method to help inform the sampling, measurement, and implementation of the other method)</li> <li>4. <b>Initiation</b> (to increase the breadth and depth of results and interpretations by discovering paradox and contradiction, advancing new perspectives of frameworks, and recasting questions or results from one method with questions or results from the other method)</li> <li>5. <b>Expansion</b> (to increase the scope of a study by using different methods for different study components)</li> </ol>	<p>Blackstock (2009)</p> <ol style="list-style-type: none"> <li>1. To contextualize research and provide more knowledge pathways in the form of the physical, the spiritual, and the emotional</li> </ol>

Collins, Onwuegbuzie, & Sutton (2006)

1. **Participation enrichment** (to combine methods to optimize the study sample by improving recruitment, determining inclusion criteria, or understanding participants' reactions to the study)
2. **Instrument fidelity** (to combine methods to maximize the appropriateness and utility of data collection instruments and protocols)
3. **Treatment integrity** (to combine methods to assess the fidelity and context of interventions, treatments, and programs)
4. **Significance enhancement** (to combine methods to enhance interpretations of data, analyses, and results)

Bryman (2006)

1. **Triangulation or greater validity** (to combine quantitative and qualitative research to corroborate findings)
2. **Offset** (to offset the weaknesses and draw on the strengths associated with both quantitative and qualitative research methods)
3. **Completeness** (to bring together a more comprehensive account of the study topic)
4. **Process and structure** (to use quantitative research to provide an account of structure in social life and qualitative research to provide a sense of process)
5. **Different research questions** (to use quantitative and qualitative research to answer different questions)
6. **Explanation** (to use one method to help explain findings generated by the other)

Chatwood et al. (2015)

1. To create space for indigenous knowledge, epistemologies, and values in the research process to enhance respect and equality of all knowledge systems and minimize conflict that can emerge when only Western methodologies are used

Chilisa and Tsheko (2014)

1. To bring to the research process indigenous tools that build and nurture relationships
2. To invoke indigenous knowledge to inform ways in which concepts and new theoretical frameworks for research studies are defined
3. To broaden the literature base so that we do not only depend on written texts but also on the largely unwritten texts of the formerly colonized and historically disadvantaged people
4. To bring to the center of the entire research process the spiritual, historical, social, and the ideological aspect of the research phenomena

(Continued)

TABLE 7.2 ■ (Continued)

Mixed Methods Research Rationales	Indigenous Mixed Methods Rationale
7. <b>Unexpected results</b> (to understand surprising results from one method by employing the other method)	
8. <b>Instrument development</b> (to use qualitative research to inform the development of questionnaire and scale items)	
9. <b>Sampling</b> (to use one approach to facilitate the sampling of respondents or cases for the other approach)	
10. <b>Credibility</b> (to enhance the integrity of findings by employing both approaches)	
11. <b>Context</b> (to provide contextual understanding from qualitative research with broad relationships or generalizable results from quantitative research)	
12. <b>Illustration</b> (to use qualitative data to illustrate quantitative results)	
13. <b>Utility or improving the usefulness of findings</b> (to develop results that are more useful to practitioners and others)	
14. <b>Confirm and discover</b> (to use qualitative research to generate hypotheses and qualitative research to test them)	
15. <b>Diversity of views</b> (to combine the researchers' perspectives as found in selected variables through quantitative research with participants' perspectives as found in emergent meanings through qualitative research)	
16. <b>Enhancement or building upon quantitative and qualitative findings</b> (to augment one type of findings with data from the other research approach)	

Teddlie and Tashakkori (2009)

1. **Addressing confirmatory and exploratory questions** (to use different methods to address questions that call to both verify and generate theory in the same study)
2. **Providing stronger inferences** (to develop better conclusions by combining methods so that they offset the disadvantages that each method has on its own)
3. **Providing opportunity for greater assortment of divergent views** (to use different methods to uncover divergent results and include diverse perspectives and voices)

Morgan (2014)

1. **Convergent findings** (to use both methods to address the same research question to produce greater certainty in the conclusions)
2. **Additional coverage** (to use the strengths of different methods to best achieve different goals within the study)
3. **Sequential contributions** (to enhance the effectiveness of one method with the other method by using what is learned from one method to inform the other)

Andersen & Walter (2013); Kovach (2012); Wilson (2008)

1. To recognize indigenous quantitative methodologies and indigenous qualitative methodologies as methodologies in their own right

Source: Plano Clark, V. L., & Ivankova, N. V. (2016). *Mixed methods research—A guide to the field*. London, UK: Sage.

Blackstock (2009) asserts that qualitative and quantitative research methods are equally appropriate for use in indigenous research. Adding to this view, Walter and Andersen (2013) argue that indigenous scholars can and should act to appropriate quantitative methodologies for their own aims. They refute the argument that quantitative research is unsuitable for the study of indigeneity (Gilchrist, 1997) and lament the near absence of quantitative methodologies within the field of indigenous research methodologies. They note that the colonization intent of quantitative research to produce statistics constructs that produce and reproduce differences between the knower (Western) and the Other requires an engagement with indigenous quantitative methodologies.

The process of enveloping quantitative research in an indigenous envelope starts with researchers' understanding of the research goal, building respectful relations with the indigenous communities developing the research question and the methodology, interpretation and dissemination strategies in partnership with the community, and observing ethical protocols that honor indigenous knowledge and are culturally responsive (Blackstock, 2009). Blackstock (2009) presents a comparison of a conventional quantitative and First Nations presentation of findings on a translational population study in The Canadian Incidence Study on Reported Child Abuse and Neglect. The research on child welfare is supported by numerous documents that give guidance on access to communities, ownership, control, and possession in the indigenous research on child welfare. Enveloping quantitative research in an indigenous envelope is presented as a mixed methods approach that brings together a conventional quantitative paradigm with a First Nations holistic worldview based on the Medicine Wheel on a translational study on child welfare. The goal was to evidence community reality that does not deny the influence of a relational worldview, emotions, or spirituality. The Medicine Wheel presents a holistic worldview that seeks balance between the spiritual, the cognitive, the physical, and the emotional.

On the translational study on child welfare, the researchers invoked the spiritual in the presentation and dissemination of the findings by employing symbolic art, poetry, legends, and teachings to add meaning to the findings. The emotional requires the researcher's emotional connection to reality. Reflexivity becomes an important component of the report process, as demonstrated by Botha (2011) in his study. In line with the concept of reflexivity, the researchers can interrogate their emotions in relation to their observation of the physical. In the study, the physical was honored by printing the report on an "ecologically friendly ink and on paper that protected old growth forests" (Blackstock, 2009). Thus, according to Blackstock (2009), the report demonstrated value, respect, and relational existence of people with the environment. In the cognitive domain, ancestral knowledge is valued, and whose language is used to communicate the findings is essential in bringing the spiritual, the physical, the emotional, and cognitive together.

The report summarized the major findings based on a conventional quantitative approach that used a summary of the findings informed by a First Nations indigenous paradigm. The cover page of the two reports, the title, and the main report are different with the First Nations report using symbolic art, photos, images, poetic language, and embodying the physical through presentation of life in the form of water and a butterfly, while the conventional approach relies on the quantitative approach where the

researchers distance themselves from the data in an effort to present an objective reality (Blackstock, 2009).

## SUMMARY

There are multiple ways of defining MMR and justifying its use. Most definitions from the mainstream paradigms focus on the mixing of qualitative and quantitative data and the methodology of mixing. The rationale for mixing focuses more on techniques and methods marginalizing other processes such as building relationships and connecting with participants and the environment in ways that show respect, are reciprocal and relevant to the needs of the Other, and are at the same time rigorous. Indigenous scholars focus on integrating nonindigenous and indigenous paradigms. The emphasis is more on combining indigenous research defined as research informed by indigenous paradigms and worldviews with Western research approaches in a way that gives the two knowledge systems equal status, creating space for the Other to retrieve, revitalize, reclaim, and restore indigenous knowledge that is vital for renewal.

Indigenous scholars define as mixed methods combining conventional qualitative research data with indigenous qualitative methodologies (Botha, 2011). The main argument is that indigenous qualitative research emanates from an indigenous philosophical, cultural, and historical stance that is different from that which informs a conventional qualitative method. Embedding quantitative research findings in an indigenous worldview (Blackstock, 2009) and mixing quantitative and qualitative data based on Western tradition and practice with indigenous research informed by indigenous philosophies, traditions, and history are also considered as mixed methods approaches. Indigenous mixed methods are about mixing indigenous quantitative and indigenous qualitative methodologies with mainstream quantitative and qualitative methodologies.

### Key Points

- Indigenous mixed methods focus on mixing the quantitative, qualitative, and indigenous research.
- Indigenous mixed methods contextualize research and provide more knowledge pathways in the form of the physical, the emotional, and the spiritual that can appeal to the ways of knowing of indigenous communities
- Indigenous mixed methods are a vehicle to decolonize and integrate indigenous and Western knowledge to enhance participation of indigenous peoples as knowers, ensure the relevance of research to their needs, and disseminate research findings to academic and community settings.



## ACTIVITY 7.2

1. Conduct a literature search on mixed methods research in the last 5 years. Discuss how the scholarship on mixed methods research is changing.
2. Search for the cited article (a), and debate whether you would consider the research design mixed methods:
  - a. Berger-Gonzalez, M., Stauffacher, M., Zinsstag, J., Edwards, P., & Krutli, P. (2016). Trans-disciplinary research on cancer-healing systems between biomedicine and the Maya of Guatemala: A tool for reciprocal reflexivity in a multi-epistemological setting. *Qualitative Health Research*, 26(1), 77–91.

## Suggested Readings

- Berger-Gonzalez, M., Stauffacher, M., Zinsstag, J., Edwards, P., & Krutli, P. (2016). Trans-disciplinary research on cancer-healing systems between biomedicine and the Maya of Guatemala: A tool for reciprocal reflexivity in a multi-epistemological setting. *Qualitative Health Research*, 26(1), 77–91.
- Blackstock, C. (2009). First Nations children count: Enveloping quantitative research in indigenous envelope. *First Peoples Child & Family Review*, 4(2), 135–143.
- Botha, L. (2011). Mixed methods as a process towards indigenous methodologies. *International Journal of Social Research Methodology*, 14(4), 313–325. DOI:10.1080/13645579.2010.516644
- Chatwood, S., Paulette, F., Baker, R., Eriksen, A., Hansen, K. L., Eriksen, H., ... Brown, A. (2015). Approaching Etuaptmunk—Introducing a consensus-based mixed method for health services research. *International Journal of Circumpolar Health*, (74):1–8.
- Hutchinson, P., Dibngwall, C., Kurtz, D., Evans, M., Jones, G., & Corbett, H. (2014). Maintaining the integrity of indigenous knowledge: Sharing Metis knowing through mixed methods. *International Journal of Critical Indigenous Studies*, 7(1), 1–10.
- Nastasi, B., & Hitchcock, J. (2016). *Mixed methods research and culture-specific interventions: Program design and evaluation*. Thousand Oaks, CA: Sage.
- Plano Clark, V. L., & Ivankova, N. V. (2016). *Mixed methods research: A guide to the field*. London, UK: Sage.

# 8

## INDIGENOUS MIXED METHODS IN PROGRAM EVALUATION

Although methods of indigenous evaluation share common ground with qualitative methods, the two are not synonymous. Not all indigenous methodology is qualitative, nor are all qualitative methods congruent with indigenous contexts.

**Joan LaFrance, Richard Nichols, and Karen E. Kirkhart (2012)**

The current limited Indigenous research presence in statistical research greatly reduces the Indigenous influence in framing the types of questions being asked and the way Indigenous data are being collected, analyzed and interpreted.

**Maggie Walter (2005, p. 31)**

### Overview

In Chapters 6 and 7 the following were noted:

- Indigenous mixed methods contextualize research and provide more knowledge pathways in the form of the physical, the emotional, and the spiritual that can appeal to the ways of knowing of indigenous communities.
- There is a need to shift from evaluation that only assesses implementation and outcome of programs to evaluation that considers the initiators of programs so that communities can own solutions to their challenges.



- There is a need for envisioning evaluation frameworks, concepts, tools, and checklists based on indigenous philosophies and cultures that evaluators can use to make evaluation contextual, culturally appropriate, and relevant to the needs of the people.

The chapter describes a multiphase indigenous mixed methods approach study to design and evaluate a risk reduction intervention. The study describes how indigenous methods that used to collect cultural knowledge and to build relationships were combined with mainstream quantitative and qualitative methods in ways that promoted relevancy and usefulness of the intervention and its outcomes to the stakeholders. The chapter illustrates an indigenous mixed methods approach that goes beyond the combination of qualitative and quantitative research approaches to the integration of the largely marginalized knowledge systems with dominant knowledge systems through a decolonization and indigenization research process. See also Chilisa and Tsheko (2012).

## LEARNING OBJECTIVES

By the end of this chapter you should be able to do the following:

1. Apply mixed methods research with an indigenous paradigm lens to program design and evaluation.
2. Appreciate the role of collaborative and participatory methods in an indigenous mixed methods program design and evaluation.
3. Comprehend the application of indigenous mixed methods in designing culturally and context specific programs.

### ***Before You Start***

Read the quotations at the beginning of this chapter, and discuss the power and value of quantitative data in indigenous research.

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## THE INDIGENOUS PARADIGMATIC LENS

A postcolonial indigenous paradigm provided a theoretical framework that informed a mixed methods research approach to design and test the efficacy of a school-based risk-reduction intervention for 14- to 17-year-old adolescents in Botswana. A postcolonial indigenous paradigm articulates a relational ontology that addresses

relations among people and promotes love and harmony in communities. Study participants make connections with each other, while the researcher is viewed as part of the circle of relations. Reality implies a set of relationships.

Indigenous methods were used to collect cultural knowledge and to build relationships; these approaches allowed for the integration of the largely marginalized knowledge systems with dominant knowledge systems through a decolonization and indigenization research process.

### A Relational Epistemology

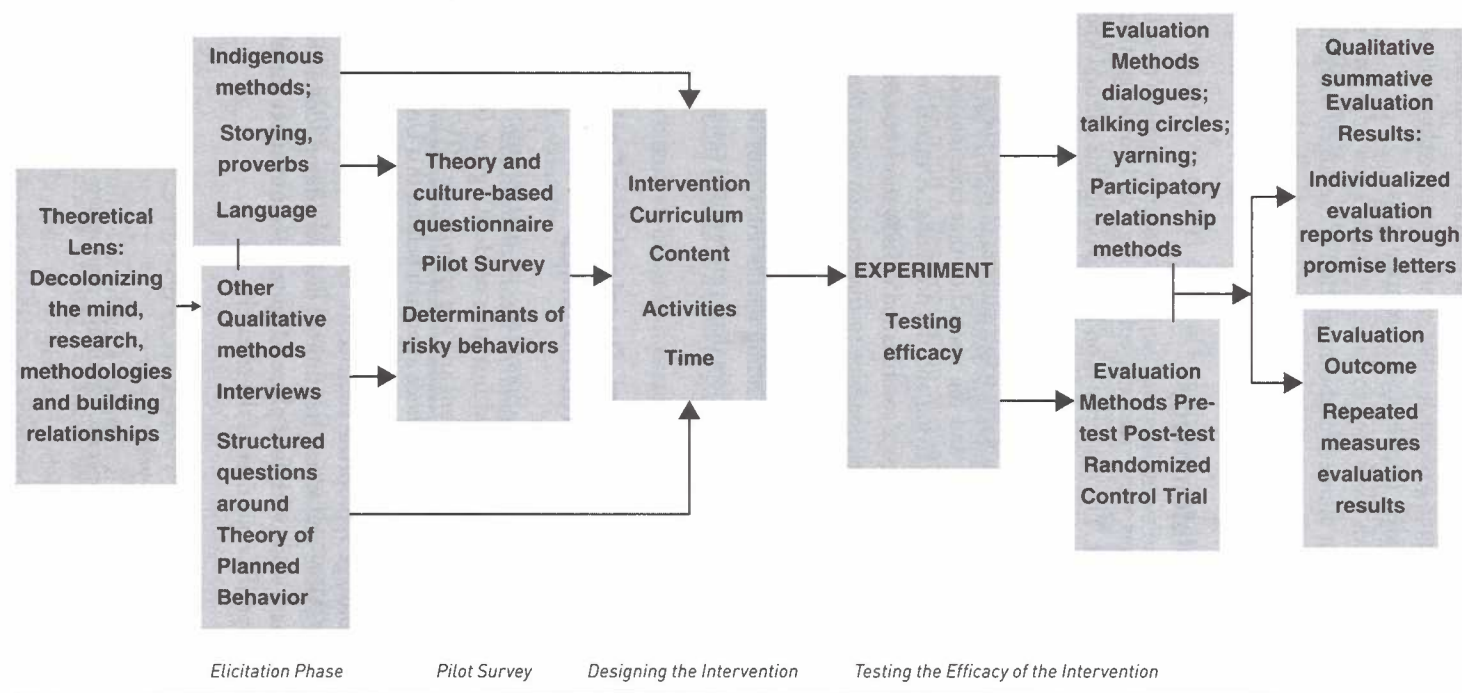
African perspectives view relational epistemology as knowledge that has a connection with the knowers. The challenge is on how to bring this cultural knowledge into the research process. The research process is informed by a relational ethical framework that moves away from conceiving the researched as participants to seeing them as coresearchers. There is an emphasis on accountable responsibilities of researchers and respectful relationships between the researchers and the researched that take into account the researched's web of relationships with the living and the nonliving. A mixed methods approach thus brings into the research process a combination of indigenous research methods and other methods to build a web of relationships so that research takes place in an environment that nurtures peace and appreciation for diversity, love, harmony, and possibilities of hope; togetherness, cooperation and collective action; and responsibilities and coalitions of disciplines and knowledge systems. Building relationships thus becomes a tool or method made up of a set of indigenous practices that is an essential component in mixed methods indigenous research.

### Preparing for the Program: Decolonizing Collaborative Research and Building Relationships

In 2007, the University of Botswana, in partnership with the University of Pennsylvania, won a U.S. National Institutes of Health grant (R24 HD05669) to build capacity to design culturally relevant and age appropriate HIV/STI prevention interventions. The indigenous mixed methods approach behind this University of Botswana and University of Pennsylvania collaborative study (to design and test the efficacy of culturally relevant and age appropriate adolescents' risk reduction intervention to prevent the spread of HIV/AIDS and sexual transmitted diseases among adolescents) is described. It was a multiphase study with four phases. Figure 8.1 summarizes the phases. The following were the specific objectives of the research:

- To identify determinants of AIDS preventative behavior among Botswana secondary school students 14 to 17 years of age
- To develop population-specific, culturally appropriate sexual risk behavior interventions
- To pilot test the efficacy of the intervention in changing sexual risk behaviors

**FIGURE 8.1 ■ An Indigenous Mixed Methods Approach**



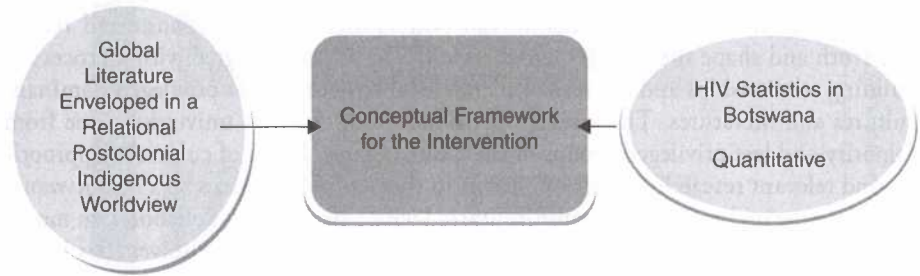
Source: Chilisa B; Tshenko G N (2014) Mixed Methods in Indigenous Research: Building Relationships for Sustainable Intervention Outcomes. *Journal of Mixed Methods Research*, 8(3) 222-233.

## Interrogating Power in Evaluation

In Chapter 6, it was noted that according to Haugen and Chouinard (2018), relational, political, discursive, and historical powers dictate what is considered reality and truth and shape the realities under review. The research started with a process of building relationships and addressing hierarchical structures that privileged dominant cultures and literatures. The research personnel from the U.S. university came from minority and less privileged groups in the United States. Issues of culturally appropriate and relevant research were as important to them as to the researchers in Botswana. Our dialogue on building relationships started with agreeing on a collaboration model that transformed hierarchical relationships that exist between the universities in the North and those in the South; academic institutions and communities and a model that created spaces for the integration of cultural knowledge with global knowledge to promote cultural relevancy and usefulness of research outcomes to communities as well as ensuring that the researchers remained accountable to the communities. We agreed on a collaboration model that gave the role of principal investigator (PI) and other leadership roles to University of Botswana researchers. This was done to break the stereotype that expertise can only come from Northern universities (Chilisa, 2005; Pryor, Kuupole, Kutor, Dunne, & Adu-Yeboah, 2009). Often, when researchers from the South are given leadership responsibilities, they feel inadequate or lacking the skills and knowledge to contribute to the research (Bresciani, 2008). Most of us involved as leaders had to continuously go through a decolonization of our minds, that is, believing that the Batswana had a cultural knowledge that can be understood by those who grow in the culture and that such knowledge was relevant to the design of appropriate and useful interventions in Botswana.

The health literature is rife with deficit-theorizing that depicts cultural knowledge and lack of urgency among Batswana as some of the factors that slow efforts to prevent the spread of HIV (Chilisa, 2005). We formed community advisory boards to serve as community theorists that could bring to the research the cultural knowledge, values, and processes of knowledge creation that could serve to make the interventions we designed relevant and useful to the communities. The community advisory board was made up of representatives of community interests. Their main role was to decolonize the research process by bringing to the creation of knowledge Batswana worldviews and knowledge to ensure that the research remained relevant and useful to the Batswana. In addition, an external advisory board consisting of intellectuals with expertise on global knowledge in intervention research from the United States and southern Africa was formed. Indigenous research theory promotes context-specific research that goes beyond the bounds of existing methods of data collection and analysis; literature and theory to provide more insights into theory development; and the development of interventions that address people's needs. It involves the study of local phenomena, using local language, local subjects, and locally meaningful constructs (Ping Li, 2011) to provide solutions to local problems. Members of the external advisory board served as peer reviewers who consistently asked us to identify and make explicit indigenous theoretical orientation, methods, cultural knowledge, and culturally specific findings throughout the four phases of the study. Figure 8.2 illustrates the conceptualization process.

FIGURE 8.2 ■ Conceptualization Process



Phase: Indigenous Methods + Other Qualitative Methods: Concurrent Design (see Figure 8.3)

Aim: To bring out culturally specific knowledge, beliefs, and practices not found in the global literature and contextualize research instruments

In the first phase, our indigenous mixed methods approach combined indigenous qualitative methods with other qualitative methods to elicit adolescents' and their parents' beliefs, attitudes, and intentions toward sex, HIV prevention beliefs, HIV/AIDS intervention programs, and preferred modes of educating adolescents on sexuality issues and preferred components of the intervention program with regard to information, skills, methods, materials, and the implementation framework. The intention was to employ a design that would enable the community and the researched to participate in eliciting cultural knowledge on adolescent sexuality and HIV/AIDS that would enable the development of relevant and useful adolescent risk reduction interventions. As a way to build relationships, coalitions, networks, and connectedness with the community, parents were involved as research participants to deepen understanding of cultural knowledge on adolescents' sexuality and sexual risk behaviors so that the interventions could be inclusive of community knowledge and community input. A culturally relevant intervention had to come from within the culture, the traditions, languages, and lived experiences of the Batswana adolescents. Finding methods that resonate with Batswana culture was another important step in ensuring that the communities and the research participants could reach back to their history, live the moment, and reclaim and valorize cultural knowledge that still remained relevant to the design of risk reduction interventions for adolescents and that which needed to be interrogated. Proverbs, metaphors, stories, and myths were used as culturally appropriate methods of gathering data on sociocultural factors that influence adolescent local knowledge regarding HIV prevention strategies such as abstinence, condom use, limiting partners, and safe male circumcision.

Participants in this method were 11 adolescents, aged 14 to 17 years and consisting of five boys and six girls. The participants were selected from two randomly sampled junior secondary schools in the city of Gaborone. In this method, participants were provided with verbal and written instructions asking them to write down stories or myths that they had heard regarding the following five behaviors: abstinence, virginity, using condoms, having multiple partners, and having only one partner.

FIGURE 8.3



## EMBEDDING THE STUDY IN GLOBAL KNOWLEDGE

Indigenous research identifies context specific models that may lead to context-bound knowledge. In blending cultural knowledge with global knowledge, the theory of planned behavior (TPB) was employed to design individual and focus group interviews that explored adolescents' beliefs and attitudes toward multiple sexual partners, abstinence, consistent condom use, limiting partners, and safe male circumcision. The TPB asserts a specific relationship among beliefs, attitudes, intentions, and behavior. More specifically, the TPB posits that intentions to perform a specific behavior are determined by three factors: (1) attitudes toward the behavior, which are seen as reflecting behavioral beliefs about the consequences of performing the behavior; (2) subjective norms toward the behavior, which reflect individuals' beliefs about whether specific referent persons (e.g., peers, romantic partners, parents, the church) would approve or disapprove of the behavior; and (3) perceived behavioral control over the behavior, which involves individuals' beliefs that they have the necessary resources, skills, and opportunities to perform the behavior. As applied to HIV/AIDS prevention among adolescents in Botswana, the TPB can be used to predict adolescents' behavioral intentions toward abstinence, condom use, and having multiple sexual partners.

Twenty-four participants were interviewed individually and asked to respond verbally to questions assessing behavioral, normative, and control beliefs related to the following three behaviors: condom use, abstinence, and having one partner. Behavioral belief questions included the following: (1) What is good about the behavior? and (2) What is bad about the behavior? The normative belief questions were as follows: (1) Who approves of adolescents engaging in the behavior? (2) Who disapproves of adolescents engaging in the behavior? and (3) Who do you know that engages in the behavior? The control belief questions were the following: (1) What is easy about the behavior? and (2) What is hard about the behavior?

Participants' responses were analyzed using a modified version of the Consensual Qualitative Research method (CQR) as described by Hill, Thompson, and Williams (1997). Data from the two data collection methods were analyzed separately. The combined results of the two methods of data collection used in this study provided

knowledge consistent with global literature as well as culturally specific knowledge. The culturally specific knowledge was on sociocultural behavioral beliefs related mainly to the consequences of prolonged abstinence. These came under three main categories of beliefs about abstinence causing ill health: abstinence causing infertility, abstinence causing a painful erection, and prolonged abstinence causing pain for girls when they eventually gave birth. A sociocultural belief domain also emerged in the context of a question on limiting the number of partners. Adolescents reported that the beliefs on limiting partners are informed by common sayings and proverbs on multiple partners. One common proverb says, *Manna keselepe o aadimanwa* (meaning, a man must be shared). Although this makes reference to men, adolescents perceive the proverb as condoning multiple partners for both sexes.

### Community Participation in Data Analysis

It should be noted that the parents, students, and community advisory board members did not participate in the data analysis. The parents' and students' voices were, however, preserved in their original form through proverbs, metaphors, and stories that were told. These were used in their original form to address behavior change. Simonds and Christopher (2013) report tensions between Western and indigenous frameworks when community advisory board members participated in a qualitative data analysis of an intervention research project that had a decolonization intent and employed a community-based participatory research approach. Participation of community advisory board members was deemed important to provide insights that would not otherwise be available to the researchers. Tensions arose when the academic researchers wanted to incorporate theory into data analysis deeming an indigenous theory not a legitimate option. The community advisory board members were not comfortable with a thematic analysis of the interview scripts. Simonds and Christopher note that one member of the community advisory board explained that themes were confusing because when making themes, everything became scattered. Crow people (the indigenous community where the research took place) "don't break things apart." Indigenous community concerns with data analysis can be addressed by allowing collaborators and coresearchers to create stories and vignettes from the transcript data or to have community participants write their stories from the transcript data (Blodgett et al., 2011; Christensen, 2012; Simonds & Christopher, 2013).

Cram and Mertens (2015) have also noted tensions when an indigenous research was incorporated within a transformative paradigm, noting that evaluators in the transformative paradigm, while claiming to pursue social justice issues, still fail to address the decolonization intention of indigenous research and evaluation. The case study in this chapter illustrates an indigenous mixed methods design that is informed by an indigenous paradigmatic lens situated in the context and needs branch. Refer back to Chapter 6.

Phase 2: Indigenous Methods + Qualitative Methods + Quantitative Methods:  
Sequential Design (see Figure 8.4)

Aim: To design research instruments that are contextually and culturally appropriate

### ACTIVITY 8.1

1. Reflect on the quotations at the beginning of the chapter, and discuss qualitative methods that you think may not be congruent with indigenous contexts in your communities and ways to address them.
2. Read the article by Simonds, V. W., & Christopher, S. (2013), Adapting Western research methods to indigenous ways of knowing. *American Journal of Public Health*, 103(12), 1–14, and discuss the pros and cons of adapting Western methods to indigenous ways of knowing.

FIGURE 8.4



### Creating Indigenous Statistical Constructs

In Chapter 2, Walter and Andersen's (2013) view that current statistical analysis is based on narrow aspects of indigenous peoples' daily lives was noted. In the second phase, the focus was on designing a culturally relevant survey instrument and using it to quantitatively measure behaviors, beliefs, and attitudes of adolescents toward sex, abstinence, condom use, consistent condom use, circumcision, and HIV. In this phase, our mixed methods approach combined indigenous methods and qualitative methods to design a quantitative survey instrument to measure the prevalence of risky behaviors. A measure of the prevalence of the risky behaviors enabled us to calculate the sample size that we required to find any significant effects on the test for the efficacy of the intervention. It also enabled the identification of the beliefs and attitudes that mitigated against positive behavior that the intervention needed to address. The survey questionnaire items were built from qualitative data based on the TPB and data derived from cultural knowledge that came through stories, myths, proverbs, songs, metaphors, and local language. The use of songs, taboos, and myths to source parents' and their children's views on sex and sexuality brought into the discussion concepts not common in the literature. The statistical analysis was thus broadened to include the adolescents' daily living experiences. During this phase, community voice was brought into the research process through the advisory community board whose role was to review the survey instrument. Reviews of the pilot questionnaire survey by the community advisory board made it possible to use content, materials, and language that was acceptable to the community.



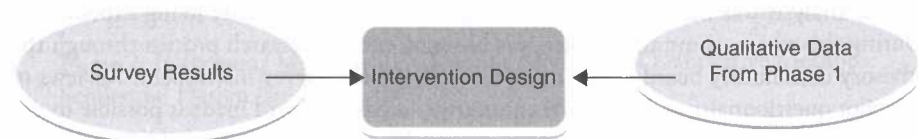
A self-report questionnaire collected data from 286 adolescents (34.9% boys & 65.1% girls) between the ages of 10 and 19 (mean age 15.02, standard deviation 1.02) in eight junior secondary schools. Multivariate regression analysis was used to evaluate the predictive power of the TPB. A multiple regression analysis to test the predictive power of a combination of theory-based constructs and those emanating from cultural knowledge revealed that sociocultural beliefs about abstinence and limiting partners predicted intentions to abstain or limit the number of sexual partners.

Phase 3: Indigenous Methods + Other Qualitative Methods + Quantitative Methods: Concurrent Design (see Figure 8.5)

Aim: To design a culturally appropriate and relevant intervention using content material from the community and the adolescents

In the third phase, the indigenous mixed methods approach combined quantitative data findings from the survey on attitudes, beliefs, and behaviors that encouraged healthy risk behaviors with cultural knowledge derived through indigenous methods and theory-based data derived through the qualitative structured interviews to develop a culturally appropriate and relevant intervention to promote behavior change among adolescents. The focus was on the type of data, content, and materials to drive an age- and culturally appropriate and relevant intervention curriculum that would increase adolescents' knowledge about risk behaviors, thereby increasing positive attitudes toward risk-reduction behaviors and increase their confidence that they have the skills to practice safer behaviors (e.g., abstaining, using condoms, opting for safe male circumcision, and HIV testing). Parental and adolescent views on the content or topics to be included in the curriculum, the activities, and the place and time of the intervention were triangulated with pilot survey data collected in the second phase to prioritize the behaviors to be addressed, the topics in the curriculum, and the amount of time to spend on each topic. The content of activities, for example, building positive attitudes toward abstinence, condom use, and limiting partners, came from traditional or local knowledge sourced through indigenous methods, as well as from the structured interviews framed around the TPB. The interventions consisted of 12 one-hour modules, with two modules delivered during each of six sessions on six consecutive school days. The process of designing the intervention thus combined quantitative methods that built on dominant theoretical frameworks and indigenous methods that brought literature and communicated findings not accessible through mainstream qualitative methods. An HIV/STI risk-reduction intervention was designed with the purpose to increase HIV/STI risk reduction knowledge and enhance

FIGURE 8.5



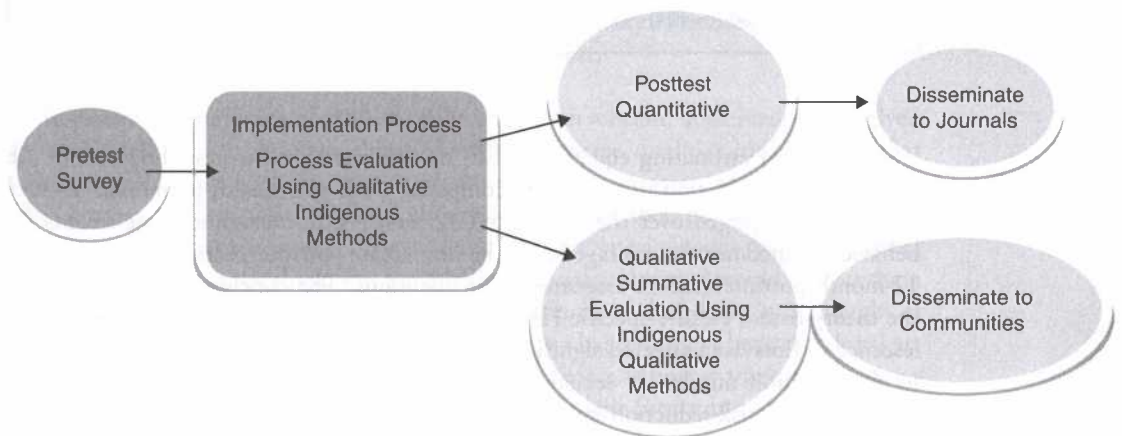
behavioral beliefs that support abstinence, condom use, HIV testing, safe male circumcision, and sticking to one partner.

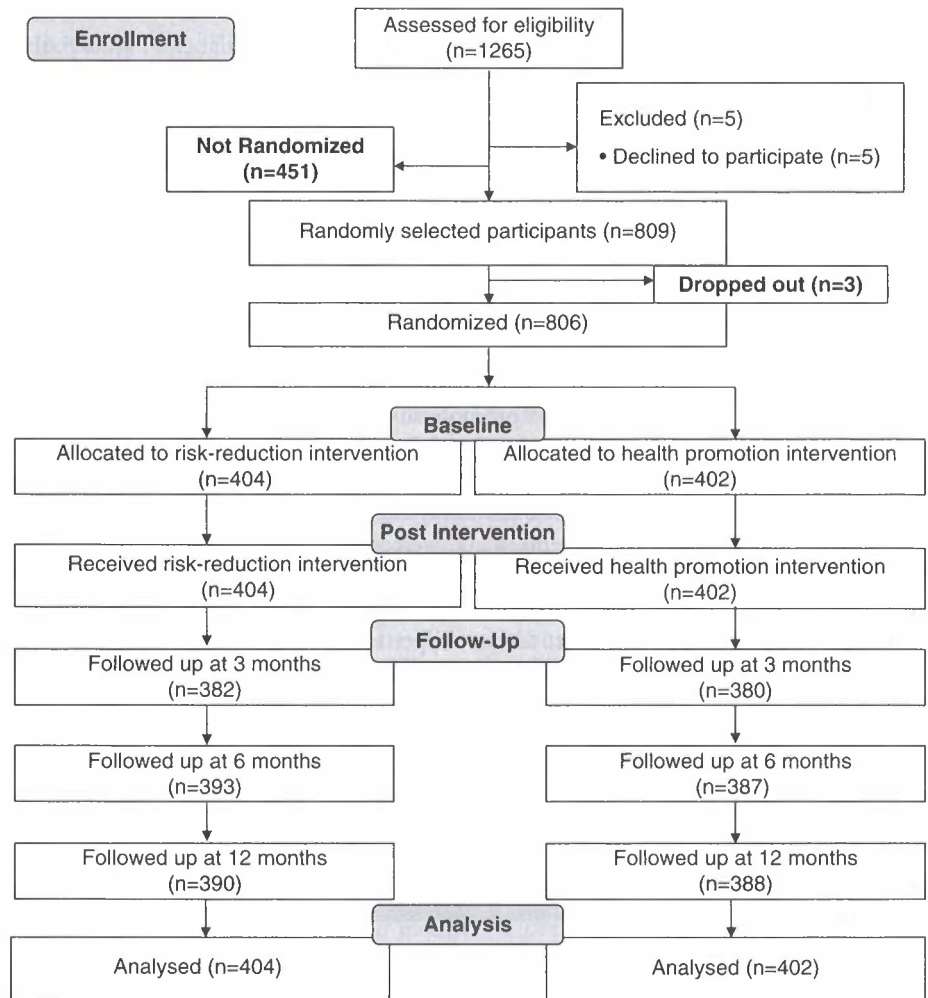
Phase 4: Quantitative Methods + Indigenous Methods: Sequential (see Figure 8.6)

Aim: To monitor intervention implementation and test the efficacy of the intervention

In the final phase, we employed an indigenous mixed methods approach to determine (1) whether the intervention was effective, (2) why it was effective, (3) with whom it was most effective, and (4) whether adolescents and their parents found it relevant, useful, and culturally acceptable. An experimental design to quantitatively measure the efficacy of the intervention was combined with indigenous methods to conduct formative evaluation to assess the relevancy, usefulness, and acceptability of the intervention. We also employed indigenous practices and tools to empower and build relationship between parents and their children that could promote sustainability of intervention outcomes and encourage lasting relationships among adolescents that could last years after the intervention. In the experiment, a pretest-posttest control group design was employed. A sample of 806 Grade 9 adolescents was randomly assigned to the risk reduction intervention and a health promotion intervention and were followed up at 3, 6, and 12 months. In line with an indigenous research theoretical lens of promoting research that is useful, relevant, and beneficial to the participants, a health promotion intervention focusing on behaviors to reduce the risk of heart disease, hypertension, stroke, diabetes, and certain cancers; increase fruit and vegetable consumption and physical activity; and decrease cigarette smoking and alcohol use was administered to the control group (see Figure 8.7). The health promotion, like the risk-reduction intervention, consisted of 12 one-hour modules, delivered in six sessions of two hours during six consecutive school days.

FIGURE 8.6



**FIGURE 8.7 ■ Participant Recruitment and Retention**

Generalized estimating equation (GEE) models were used to test the effect of the HIV/STI risk-reduction intervention compared with the health-promotion control intervention averaged over the 3-, 6-, and 12-month postintervention assessments for behavioral outcomes and averaged over the immediate postintervention and 3-, 6-, and 12-month postintervention assessments for intentions. The conclusion drawn was that the theory-based, culture-specific HIV/STI risk-reduction intervention for middle adolescence in Botswana affected significant changes over 12 months in positive intentions to abstain, limit number of sexual partners, and to circumcise, and also significantly increased HIV risk-reduction knowledge and parent-child communication, supporting the need to continue interventions tailored to adolescents' age and culture.

## Indigenous Qualitative Evaluation Embedded in an Experimental Design

The indigenous mixed methods approach combined participatory action research with the appreciative inquiry (Ludema, Cooperrider, & Barrett, 2006) and desire-focused (Tuck, 2009) frameworks to guide the implementation of the intervention. Indigenous conversational methods, namely adolescents talking to their parents, talking circles, and yarning, were used as data collection methods. One of the criticisms labeled against participatory action research is that most of the approaches are problem-focused aiming at discovering communities' unmet needs. Conceptions of communities as knowers and participants as researchers require researchers to move from problem-focused modes of inquiry that see communities as places full of problems and needs that can only be solved with the help of outsiders, to change-focused approaches that emphasize strength and positive images of the researched (Ludema et al., 2006; Mertens, 2009; Tuck, 2009). In the change-focused approach, the researched reflect on their qualities and move toward a self-discovery. They also dream and envision the best that they could be, dialogue on strategies to implement their dream, and draw a plan to take them to their destiny.

The first activity in the intervention was directed toward building group cohesion and a feeling of togetherness and worthiness among participants. At every session, there were not less than 20 adolescents. Among the Bantu people, symbols are an important strategy of building togetherness. In the intervention, the "being" relationship with others was nurtured through the use of a shield as a symbol that defined the identity of the groups. In addition, naming gives character to whatever is named. The name "Own the Future" was given to the intervention groups, and a motto, "Pulling Together We Will," was adopted by the group as ways of knowing themselves and the goals that they stood for. One of the activities of the day thus reads,

Today you enrolled in the teen club, Own the Future. Own the Future is a club to give you the skills to take control of your life, make responsible choices, plan for a bright future, and achieve your goals and dreams. Our motto in this club is Pulling Together We Will. In this teen club, Own the Future, you promise to encourage and support each other's efforts to avoid risky behaviors and achieve your goals. Your parents could also give you support.

In one of the activities of the first day of the intervention, adolescents were given approximately five minutes to think about the positive qualities and phrases that reflected their good qualities, that is, their strengths, character, and determination. They wrote and drew positive images about themselves on their personal shields. They were encouraged to express who they were and what was special about them. They were also made aware that the shield was a symbolic personal armor that would protect them from risky sexual behaviors and health problems. Some of the adolescents thought of themselves as helpful individuals and therefore drew a hand on their heart, while others drew a heart to show that they were kind-hearted people. Another important activity of the first day was to get participants to think about their future and understand that their behavior would impact on what they would be in the future. The adolescents

then completed a goals and dreams timeline listing their goals and dreams from the current time to a day in the future, which could have been 5 to 10 years into the future. They were to discuss with their parents the goals and dreams timeline and their personal shield and to review and finalize the penultimate version. The two activities are anchored in the desire-centered research frameworks that move away from deficit approaches that are common in research with marginalized groups, to build confidence in the participants to project into the future and imagine possibilities of hope and images of transformed communities.

Parental interest and involvement in their children's lives was crucial to the implementation of the intervention and also for sustainable positive behavior change. Letters were written to parents explaining the intervention and inviting them to assume responsibility to discuss their children's goals and dreams. Researchers relied on the adolescents to hold conversations with their parents that would capture the voices of their parents and keep them engaged in the intervention. Several factors can affect the validity of the data collected by adolescents. One of the factors is the cultural taboo on discussing sexual matters with their parents, which makes initiation of a discussion very difficult and sometimes impossible. The findings from the qualitative data in the first phase of the intervention indicated that for the intervention to work, there was a need for parent-child communication about sex and sexuality. Most of the communication between parent and child involved sending children on errands and counseling or scolding or disowning them after the children were already sexually active, when they were already either pregnant or in trouble. Parents felt inadequately informed about matters concerning sex and sexuality, were embarrassed, or had difficulty finding a suitable time to talk to their children. To address the lack of parent-child communication, adolescents were introduced to seven effective ways of holding conversations with their parents, which required them to choose time to talk to their parents, have a plan to start the conversation, be courteous, present accurate and factual information in a concise and convincing manner, and to always present a complete picture of the issue for discussion. They were trained on how to approach their parents and get them to discuss sensitive matters with them through role-play.

To sustain adolescents' and their parents' voice in the intervention, each day's activity involved a process where adolescents took homework assignments that required them to find out more about their parents and the role they would play in supporting them to live healthier lives, as well as find out their parents' views on the daily activities. Participants became active researchers, taking action to engage their parents in inquiry, recording their observations and interviews; critically reflecting and evaluating their action research; and using the information to inform their next cycle of activity in the intervention.

### Indigenous Conversation Methods

Each day started and ended with a talking circle. The talking circle was used as a method to gather adolescents' views on the intervention process and to report on the conversations with their parents. The talking circle was also used as a method to build group trust and cohesion as well as develop openness and confidence among adolescents. Talking circles are based on the ideal of participants having respect for each other and are an example of a focus group method derived from postcolonial indigenous

worldviews. See Chapter 11 on the talking circle. With regard to the intervention, adolescents sat in a circle at the beginning of each day's reports on the assigned homework and at the end of each day, commenting on what they had learned. Participants were only allowed to talk when they were holding a shield, a symbol for self-protection and, in the context of the intervention, protecting one from sexual risky behaviors. In general, talking circles on the assigned activities informed the facilitators of the opinions/views of the parents and adolescents. The information was used as feedback to empower the adolescents in getting their parents involved in assisting them with the assigned activities and in ensuring that the intervention was relevant and acceptable to both parents and their children.

### The Shield as a Symbol of Protection

On the last day, adolescents wrote letters to themselves promising how they would protect themselves in order to achieve their dream goals. They also wrote letters to their parents telling them what they would do to ensure they reached their goals and how they wanted their parents to assist them. The promise letters laid the foundation for parents and their children to continue the dialogue on the goals and dream timeline and to explore risky behaviors that are possible obstacles to the achievement of the goals and dreams after the researchers left the site. Each adolescents' pledge, promise letter, and goals and dreams timeline served as documented data that adolescents collected on themselves and as individualized action-oriented outcomes. The adolescents discovered more about themselves and their parents than they could read in a researcher-centric report. The individualized adolescent's reports to their parents gave voice to each adolescent and preserved each adolescent's and family's uniqueness. In engaging adolescents to research themselves and their parents and to submit self-promise letters to their parents, as well as their goals and dreams timelines at the end of the interventions, we preserved the multiple voices of adolescents that get silenced when researchers look for common patterns in their data, and we also disseminated the adolescents' input to their parents. We were also able to reach a larger proportion of the community than would have been possible without engaging the adolescents.

The yarn method was used to evaluate participants' views on the effectiveness of the intervention. Yarning has been described as a way of holding a conversation (Bessarab & Ng'andu, 2010; Kovach, 2010). When used in research, it is called research yarning, and it is a conversational method that is directed to a specific area of inquiry with a definite purpose. In the last session, the facilitators held a yarn ball and reflected on what they had learned from the intervention. Holding on to the thread, the ball was thrown to a participant of choice who also talked holding the ball, mainly reflecting on what he or she had learned from the intervention and how the intervention impacted their goals and dreams. The activity continued until every participant had a chance to talk. The visual picture at the end was that of a web of connections showing how each participant was connected through the thread to one another. The web of connections served to summarize and emphasize the relationships that were built throughout the intervention process.

## SUMMARY

The adolescent risk-reduction intervention project shows how an indigenous mixed methods approach combined well-established qualitative and quantitative methods and indigenous data collection and relationship building methods to inform the design and implementation of an intervention that accessed cultural knowledge to ensure relevancy and usefulness of the intervention to adolescents and their parents. The conclusion drawn is that when these methods are combined, they bring into the research cultural knowledge not easily accessible through the global literature and promote research relevancy and usefulness, as well as build community relationships. It is also important to note that methods and tools for building relationships and creating positive identities and images of hope and of transformed communities are important components of an indigenous mixed methods approach that seeks to make research responsive and useful to communities. An indigenous mixed methods approach goes beyond the combination of mixed quantitative and qualitative methods to engage in a decolonization and indigenization of the research process and an integration of diverse knowledge systems as well as building relationships and creating spaces for the researched to dream about a better future.

### Key Points

- Relationality, connectedness, and building relationships are key in indigenous research and evaluation.
- Indigenous research moves away from finding deficits in communities to building community strengths.
- Symbolism plays an important part in indigenous participatory research.
- A mixed methods approach that uses an indigenous research paradigm seeks to integrate multiple ways of knowing and seeing the world, multiple standpoints, and multiple values.
- A mixed methods approach that uses an indigenous research paradigm promotes a multidirectional lending and borrowing of knowledge systems between dominant and marginalized cultures.
- Storying is an important methodology in indigenous interventions.

### ACTIVITY 8.2

Conduct a literature review on the design and evaluation of culturally specific interventions. Critique the articles in terms of the following:

1. The paradigm that informs the design and evaluation of the intervention

2. The role of stakeholders in the design, implementation, and evaluation of the intervention.
3. The process and tools used to build relationships among all stakeholders
4. Culturally specific methods and frameworks used to design, implement, and evaluate the study
5. The participatory action research in the study if any

## Suggested Readings

- Chilisa, B. (2005). Educational research within postcolonial Africa: A critique of HIV/AIDS research in Botswana. *International Journal of Qualitative Studies*, 18(6), 659–684.
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