

WHAT IS MENTAL HEALTH AND WELLNESS?
PERSPECTIVES FROM NATIVE AMERICAN YOUTH

by

Katherine Maria Schlatter

Dissertation Committee:

Professor John Allegrante, Sponsor
Professor Sonali Rajan

Approved by the Committee on the Degree of Doctor of Education

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ABSTRACT

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Katherine Maria Schlatter

The purpose of this participatory research was to gain the perspective from the youth of a plains tribe Native American community about their concept of mental health and wellness, and to discover how youth participants related these ideas and narratives to their life processes and experiences. This study also investigated the methodological use of participatory photo-elicitation for talking about mental health and using grounded research theory to explore what types of themes and testimony are most common. This participatory research was done in partnership with an American Indian-operated health promotion and disease prevention program that is tackling inequity in mental health youth outcomes. Forty-one children ages 9 to 17 participated in this qualitative study. Semi-structured one-one-one interviews using the participatory photo-elicitation method generated conversation and formed the basis of the raw data. Grounded theory was employed in both data collection and analysis. A “zig-zag” pattern of data collection defined basic subgroups of children by age, allowing for a saturation of themes. The five major themes that emerged were: strategies for mental health, ecology and mental health, identity and mental health, social support/loss of social support and mental health, and, ambivalent feelings/thoughts about mental health. Categories within themes held across the three age groups and overlapping themes held theoretical importance. Photo-creation followed

by photo-elicitation resulted in a rich relay of diverse testimony including literal translation, metaphor, analogy, shadowed data, and personally recounted lived experiences, often shared via expository dialogue. The saturation of themes showed fidelity to developmental groupings. Identity, particularly Native identity overlapped with themes of strategy and ecology. This study heightens awareness that most older children in this sample identified loss of a loved one as part of their lived experience of mental health. A majority of children spoke of mental health and wellness strategies that included finding balance, healing, seeking social support and inhabiting at least one positive ecology. Finally, many children related their concept of mental health to their natural surroundings and the sky. Some children used visual and verbal metaphors such as the medicine wheel, a Native quilt, the undulation of a landscape, and the tipi to help describe their concept of mental health and wellness.

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DEDICATION

This project is dedicated to the children of Fort Peck Tribes.

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I – INTRODUCTION

This project revolves around a key question: “What is mental health and wellness?” put to children who are either on the cusp of their adolescent years or are traveling their adolescent journey toward adulthood. It is not an extraordinary question, nor is it a defining one. It is not a novel question, and indeed it does come with its own cultural burdens and biases which, as researchers, we generally seek to minimize. However, the merit in asking children to investigate their own concept of “mental health and wellness” is to give the participants the role of “investigator” to both report, reflect on, and explore their own thoughts, concepts, and feelings about “staying healthy in the mind.” This research was conducted in partnership with two community-based co-investigators who serve this youth population on a daily basis through both area schools and school-based health clinics run by the local reservation-based health promotion and disease prevention program of Fort Peck Tribes. The youth population are rural, reservation-based residents, affiliated with the Fort Peck Tribes situated on the Northeastern plains of Montana. Health care providers and vital statistics attest to the high levels of adversity, morbidity and mortality among youth in this community (The Community Health Assessment Committee, 2017). Empowering participants by creating an opportunity for perspective taking and the creation of knowledge has its roots in Paulo Freire’s (1970) revolutionary pedagogy. But, importantly, empowerment is part of the decolonization process.

Indigenous scholar Winona Lu-Ann Stevenson (2000), a member of the Cree, explained: “Decolonization is about empowerment—a belief that situations can be transformed, a belief and trust in our own peoples’ values and abilities, and a willingness to make change” (p. 221). This passage is from Stevenson’s doctoral dissertation which explored how oral history from indigenous communities has been ignored, delegitimized, and sidelined by non-Indigenous historians as unreliable. Stevenson explained in her doctoral research that the decolonization of

history comes in part through the restoration of the status of oral history, and with it the rich tradition of narrative and transmission of knowledge. She questioned why, in so many research projects involving oral history, that the so-called historians removed the voice from the data and chose to summarize the narrative instead of letting the voice be heard in its original format (pp. 132-133). *Colonialism* covers many forces of adversity for Indigenous scholars. Taiaiake Alfred (2004) gave this insight:

We understand colonialism as the major historical evil that our people have had to face; and we understand it mainly in material terms, as political injustice, domination, dispossession of lands, or economic oppression.... But I believe that the true meaning of “colonialism” emerges from how we as Indigenous people have lost the freedom to exist as Indigenous peoples in almost every single sphere of our existence. (p. 89)

Caution is needed in the discourse of decolonization. Scholars Tuck and Yang (2012), warn of the many ways in which decolonization, and its meaning to indigenous populations has been both appropriated and metaphorized in research and literature by well-meaning, but ultimately damaging non-native scholars (Tuck & Yang, 2012). Indeed, the scholars warn that:

The metaphorization of decolonization makes possible a set of evasions, or “settler moves to innocence”, that problematically attempt to reconcile settler guilt and complicity, and rescue settler futurity. (p. 1)

Native Americans and Indigenous groups in the United States experience some of the highest rates of mental health morbidity (Beals et al., 2005; Cockerham, 2016), a situation inextricably linked to colonization, genocide, displacement, structural racism, and profound adversity (Gone & Alcántara, 2007). Native Americans also experience increased rates of violent and accidental deaths, and incarceration, compared with the general U.S. population (Saul, 2014). The stakeholders of youth mental health in a rural plains tribe setting (parents, extended family, tribal elders, guardians, peers, teachers, care providers, program administrators, and health educators, to name a few) face reams of research that detail youth disparities and risks (Alcántara & Gone, 2007; Espel, 2015), and vital statistics showing the loss of young life often

reflects underlying health inequities (Espey et al., 2014; Herne, Bartholomew, & Weahkee, 2014; Murphy et al., 2014). Some more recent literature reviews detailing Native youth disparities also discuss youth protective factors (Alcántara & Gone, 2007), yet few offer the youth perspective. As such, key stakeholders may rarely get a chance to glimpse a child's perspective and their ideas and concepts of mental health and wellness.

The *strength-based* (Bartgis, 2016), or *strengths-based* approach suggested by several Native American scholars (Bartgis, 2016; Garrett et al., 2016; Stewart, Moodley, & Hyatt, 2016; Yellow Horse Brave Heart, Chase, Elkins, Martin, & Nanez, 2016) for perspective taking and enhancing youth mental health and wellness should not be confused with the investigative traditions and "metatheory" (p. 307) of resilience and resiliency research (Richardson, 2002). Indeed, the resiliency field offers widely accepted constructs of coping, even thriving in the face of adversity (Richardson, 2002). Some of this work has relevance to Indigenous and Native American perspectives, according to Kirmayer, Dandeneau, Marshall, Phillips, and Williamson (2011). But Indigenous and Native American scholars, and many writing about Native American populations and mental health warn that caution is needed because the models of resilience were developed by researchers investigating adults and children with severe to debilitating mental illness (Kirmayer et al., 2011), and many of the populations studied have little in common with Native American youth (Kirmayer, 2012; Kirmayer, Brass, & Tait, 2000; Kirmayer et al., 2011). Eduardo Duran, a Native scholar and practitioner of mental health, who received training in both western and Native traditions of healing, warns that "usually discussions focus on pathology or suffering of the patient, under the pretense that the patient's suffering exists in a vacuum. This style of psychologizing perpetuates blaming-the-victim approach" (p. 20).

The seed for this investigation first came from conversations with staff, administrators, and providers of a tribe-owned health program situated in this plains tribe community. These

conversations were about which types of programming and social support might best support the mental health and wellness of area youth. The seed of this inquiry germinated into a full research project because the literature about youth had little to offer on how to promote the youth's perspective as they emerge as mental health strengths, particularly for plains tribe youth in the rural reservation setting. It is therefore hoped that this research holds the potential for informing the stakeholders of a small rural mental health and social support program, and may inform the health promotion field in several ways. First, it may offer insight into tightening up the well-known methodology of participatory photo-elicitation for the very specific application of encouraging children to share their mental health concept of wellness and strengths. Second, it begs for more attention on the oft-neglected power of photo-elicitation rather than the field's darling—photovoice—which has dominated health promotion research for several decades. Because of the widespread contemporary use of digital photography, youth take to the medium of visual expression with ease and enthusiasm, and this is notable because many scholars still lament how social science disciplines have privileged word-, scale-, and number-based methodologies for elicitation and key investigations (Prosser & Loxley, 2008). Third, the grounded theory approach following participatory photo-elicitation has rarely been explicitly applied to the analysis of raw data eventuating from photo-elicited interviews (López, Eng, Robinson, & Wang, 2005; López, Eng, Randall-David, & Robinson, 2005).

Thinking beyond the research offered here, some health promotion scholars might ask if perhaps the creation of digital images is too ordinary and bogged down with current youth culture trends. Photographs as material artefacts have been evaluated for their evocative nature in ethnographic studies for decades (Prosser & Loxley, 2008). Some might trace early photo-elicitation practices back to more than a century's worth of visual elicitation for ethnography and anthropology (Harper, 2002). However, many of these ethnographic practices were not

linked with the community's goals. This point is made to highlight the important demarcations that need to be clarified at the inception of this research. Here, participatory photo-elicitation is used to elicit verbal conversation that describes inner thoughts and concepts about mental health and wellness. The digital images are not evaluated in this doctoral project for their own intrinsic worth or meaning, however, images may be offered as visual material to highlight the thoughts from Fort Peck youth participants.

A cornerstone of this research orientation is participation, as the investigators adopted the tradition of participatory research (Green et al., 1995), which, as is often the case, is also "community-based" (Wallerstein, Duran, Oetzel, & Minkler, 2018b). Indeed, community-based participatory research (CBPR) orientation is among the most endorsed research methods by Native American scholars and tribes seeking a sharper understanding of youth health and wellness (Satter, Randall, & Arambula Solomon, 2014; Schanche Hodge & Struthers, 2014; Tom-Orme, 2014; Welty, 2014). Participatory research comes with the promise that the lead investigator's intentions, practices, and findings are not only aligned with the interests of the community, but are also driven by community ownership of the findings (Wallerstein & Duran, 2006). Moreover, the research participants are key stakeholders, not just in theory but, through the application of the method (Wallerstein, Duran, Oetzel, & Minkler, 2018a). Well-conceived participatory research also fits in with the decolonization agenda promoted by Native and Indigenous scholars who are advocating and promoting health among Native peoples (Airhihenbuwa, 1994; Eduard Duran & Firehammer, 2016; Kirmayer, Gone, & Moses, 2014; McCabe, 2016; Wallerstein & Duran, 2006; Wheeler, 2001; Wilson, 2004).

Project Setting

The Fort Peck Health Promotion/Disease Prevention and Wellness Program has been awarded for its ability to widen care and the types of specialized care it offers to its population of roughly 2,000 youth tribal members (Jorgensen, 2007). Here, the Montana Healthcare Foundation explains a recent honor to this program (*Montana Health News*, 2015):

The Fort Peck Tribes Health Promotion Disease Prevention School Based Health Centers was selected as one of only three programs in the United States to receive a “High Honors” award in 2015 from the Harvard Project on American Indian Economic Development’s Honoring Nations program. More than 87 tribal programs across the nation applied for the honor. (n.p.)

The Health Promotion/Disease Prevention and Wellness program (hereafter referred to by its specific designation as the HP/DP) instituted specific interventions aimed at fostering health improvement among area adolescents as a means of addressing longstanding health disparities. These programmatic efforts touch multiple areas of strategic interest outlined in the Healthy People 2020 literature. For example, the HP/DP program tackled low accessibility to care by introducing five school-based health clinics (SBHCs) over the past 3 years, and by providing primary pediatric care to all participating school students through these clinics. Separately, the HP/DP program hired full-time providers and partnered with outside providers, academic institutions, faith-based organizations, and charitable givers to offer other key services such as vision screening, oral health checkups, and dental cleanings.

A major strategic interest of this HP/DP program has been to expand the availability and specialization of youth mental health care in and outside of area schools. In recent years, the HP/DP has employed a full-time clinical psychologist, several social workers, a psychiatric nurse, and initiated a program of psychiatric care via telemedicine. There is high demand for mental health care services, and in addition to local hires, HP/DP’s partnership with outside providers allowed for the rapid expansion of talk therapy, classroom-based behavioral health initiatives,

and psychiatric care. The HP/DP has also initiated a parallel social support programming that offers extracurricular and summertime activities, including a culturally tailored Native American dancing group, equine skills training, hosting nursing students to teach modules of health education, health advocacy-themed field trips, native sports camps, traditional archery, crafting, culturally important skills (such as fire making and basket weaving), and a limited number of work opportunities. Program leadership hopes the combination of mental health care and social support helps youth avoid crises in their childhood and adulthood. Poor mental health is linked to unintended injury, substance/alcohol dependence, the early onset of chronic disease, and conditions such as depression, anxiety, and trauma-related problems, all of which are common problems (Community Health Assessment Committee, 2017; Roosevelt County Community Health Department, 2016). As such, this project sought to investigate the perspective from youth so that program providers and those offering youth social support may be better informed.

Rationale, Orientation, Research Questions, and Specific Aims

This section details the research rationale, orientation, and research strategy that encompasses a conceptual model, three research questions, and three specific aims. Chapter II reviews the health literature relevant to Native American youth, Native American scholars writing on mental health and youth issues, and the key orientation from the field of health promotion research. Chapter III of this dissertation outlines the methods and procedures used in obtaining the data as well as the data management and data analysis plan.

The Study Rationale

The gaze of the main investigator is one of health promotion research; as such, the specific aims and questions that follow were designed with the potential to inform the field of

health education and promotion. The overarching objective of this research is to put the pre-adolescent and adolescent child at the center of this participatory investigation to explore youth concepts of mental health and wellness. This objective lends itself to gaining a better perspective of youth concepts and the lived experiences of mental health and wellness. There are dual purposes for gaining this key perspective.

First, for this Native-operated health program (referred to here as the HP/DP) and the specific population it serves (referred to here as a Native American, rural plains tribe youth population), this research may inform mental health care by helping providers better orient their dialogue with youth so that communication between client and provider is of a high quality. Providers may also find other benefits in high-quality communication, for example, or improved ability to tailor therapy. The findings may also inform the HP/DP program's fledgling social support model and its related programming. The HP/DP staff expanding social support programming are tasked with allocating funds, space, staff, and equipment to specific activities. As such, the ideas generated in this project about how youth link activities and types of support to their mental health and wellness could inform the administration involved in making decisions about further development.

Second, beyond this HP/DP program and the rural Native American plains tribe youth community it serves, this research is scholastically important as it potentially builds greater insight into how researchers may use photo-elicitation to investigate mental health concepts that are not easily communicated because of their internalized nature in wider youth populations. Thus, this research is also potentially significant because it offers insight into how youth in three adjacent age ranges share details and narratives about their inner working model of conceptualized mental health and wellness. The method of photo-elicitation may encourage

youth to use metaphor or analogies, for example, whereas relaying lived experiences and shadowed data may be less common—or perhaps vice versa.

The Research Orientation

This research links to the health promotion literature in several ways, and thus is aimed at expanding and informing the field of health education, health promotion and behavioral studies. We begin with a quick review of key area of the research orientation, including participatory research, empowerment education, grounded theory, and cultural humility.

Participatory research. From its inception, participatory research (Green et al., 1995) has been concerned with giving agency to voices that may lack the audience, language, opportunities, or forum to frame health experiences. In keeping with that tradition, the investigators anticipated that complex inner thoughts about mental health and wellness are both challenging and less explored areas for framing the wider health issues that youth commonly struggle to communicate. Youth generally are said to have fewer opportunities in which they may voice concerns and gain a sense of agency on health topics (Rodríguez & Brown, 2009). Perhaps this research has the potential to turn a participatory gaze of health promotion on the inner processes of mental health and wellness in a situation that feels safe, private, and free of judgement or therapeutic necessity.

Mistrust of outsiders and researchers is always a key limiting factor in research projects where the lead investigator is not from the local community, and especially in Native American communities which have suffered a history of unethical and stigmatizing research by outsiders. In this project, the CBPR approach enabled partnering with the HP/DP leadership of Fort Peck Tribes, and the method of participatory photo-elicitation and the emergent stances offered through grounded research were all ways in which the methodology addressed these key

community needs.

Empowerment education. The idea, or rather paradigm, re-conceptualized by Airhihenbuwa (1994) set the stage for the further development of participatory research. He wrote, “This process of engaging the teacher/interventionists and the students/audiences in the production of meaning, value, pleasure, and knowledge should be central to the mission of health education” (p. 345). Airhihenbuwa explained how empowerment is different in different situations because it reflects the varied needs of individuals. He also explained that one major problem in the planning of health programs is that there is a “preoccupation” with seeking a universal solution. Indeed, Airhihenbuwa (1994) identifies this “fixation on universality” as hugely problematic. For one, it produces a common denominator for global health, education, and development—and results in thinking that shows its paucity for ideas (pp. 350-351)—with the elucidation of differences rather than the production of places where differing voices may be heard. But expression through the creation of images (participatory photo-creation followed by photo-elicitation) offers the promises that this small population will be heard by a program that seeks to support them in the most authentic way possible—by understanding their specific perspectives on mental health and wellness, as it relates to their lives, and elicited ideas, stories, and concepts.

Grounded theory. This line of inquiry describes a type of qualitative approach in which real actualities are uncovered with no preconceived hypothesis (Glaser & Strauss, 2008). This project involves photo-elicited interviews as the raw material (Corbin & Strauss, 1990). In a critical review of grounded theory research, Corbin and Strauss (1990) explained that “grounded theory seeks not only to uncover relevant conditions but also to determine how the actors under investigation actively respond to those conditions, and to the consequences of their actions. It is the researcher’s responsibility to catch this interplay” (p. 441). The processes and

steps of grounded theory are employed to analyze the raw data whilst avoiding any major preconceived ideas about mental health and wellness from driving this analysis (Charmaz, 2014a; Glaser, 2017; Glaser & Strauss, 1967). Figure 1 presents a visualization redrawn from a diagram appearing in Corbin and Strauss (2014).

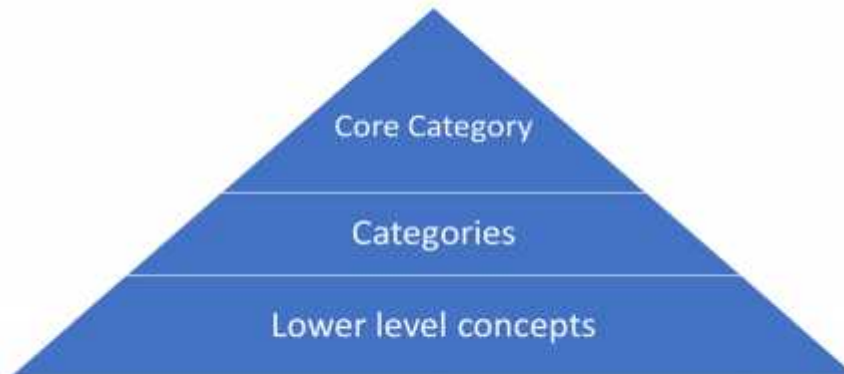


Figure 1. Grounded theory

Redrawn from Corbin & Strauss, Diagram 4.1, Prelude to analysis (p. 76), in J. Corbin & A. Strauss (Eds.), (2014), *Basics of qualitative research: Techniques and procedures for developing grounded theory*

Cultural humility. Melanie Tervalon helped coin the term *cultural humility*, along with Jann Murray-García in a 1998 landmark publication. As they define it, cultural humility engages an individual in a lifelong commitment toward self-evaluation and self-critique (Tervalon & Murray-García, 1998). Cultural humility encourages researchers, physicians, investigators, and health educators to ask about the needs and practices of those participating in research or of those seeking treatment (Tervalon & Murray-García, 1998). Also, a strong sense of cultural humility means that no judgment should be based on gender, ethnicity, economic status, or other aspects of a participant's identity, including community culture, assumptions, practices, rituals, or norms (Tervalon & Murray-García, 1998).

In this research project, the notion of cultural humility is especially important given the mistrust that eventuated from a history of deeply unethical research by outsiders with Native American communities. The investigator and co-investigators in this participatory investigation asked: “What is mental health?” Here, as in all research, it is important to acknowledge the assumption that mental health is a construct in a western tradition, and not necessarily one that is found in, or that may overlap with, any Native concept in this plains tribe community. Native American scholar Joseph Gone (2004) acknowledged that mental health is a western concept but continues to write extensively about mental health from an epidemiological, practice, and culture-based perspective. It is important to be reminded of this and other cultural biases introduced into the research. This is revisited in the section on study limitations.

A Conceptual Model

Many human developmental researchers have referred to the “ABC’s” of youth development as “Agency, Belonging and Competence” (Carver, 1997, p. 1). Lerner, Fisher, and Weinberg (2000) suggested the “Five C’s” of “competence, confidence and connections” (p. 15) as a key way of interpreting healthy youth development outcomes (also see Roth & Brooks-Gunn, 2005). Indeed, eliciting youth inner thoughts about mental health and wellness may very well touch on issues of agency, belonging, competence, confidence, and connections as they relate to mental health and wellness. But the above concepts were conceived by western scholars, who crafted their theories from research conducted with Non-Native youth populations, and the findings may not hold true for Native American youth.

Pediatric health problems commonly addressed by the HP/DP school-based health clinics range from recurring head lice to unmet psychiatric needs. Yet, even seemingly small health problems, such as recurring head lice, have a mental health element to them, according to the director of the Fort Peck HP/DP program (Smoker, 2017), who observes how recurring

head lice in some individuals causes shame and affects school attendance. Health promotion planners in the HP/DP conceptualize the etiology of poor health as being linked to environmental factors such as poverty, the legacy of poor access to primary care, poor access to specific care needs, and underinvestment in the Indian Health Service (IHS) Hospital. Native American scholars and advocates point to these issues and to trauma, or more specifically “historical” or “intergenerational” trauma, as major factors that contribute to health disparities. Many Native American and Indigenous scholars have conceptualized historical trauma as encompassing some key areas of study, including the intergenerational transmission of trauma and continued adversity specific to the Indigenous experience in the United States (Danieli, 2009; Duran, Duran, Yellow Horse Brave Heart, & Yellow Horse-Davis, 1998; Yellow Horse Brave Heart, 1998, 2000, 2003; Yellow Horse Brave Heart, Chase, Elkins, & Altschul, 2011; Yellow Horse Brave Heart & DeBruyn, 1998), whereas Kirmayer et al. (2014) wrote of the “ongoing structural violence” (p. 299) that pervades many Indigenous communities in North America as well as “self-vindicating loops” (p. 299) for individual and collective healing.

Developmental psychologist Urie Bronfenbrenner (1974, 1977, 1992) wrote that to understand the challenges of youth and youth development, the entire system must be understood. He conceptualized this in a diagram that has since been redrawn hundreds of times. Figure 2 shows the layers of the “onion” from Bronfenbrenner’s conceptual model as they are believed to be related to youth development.

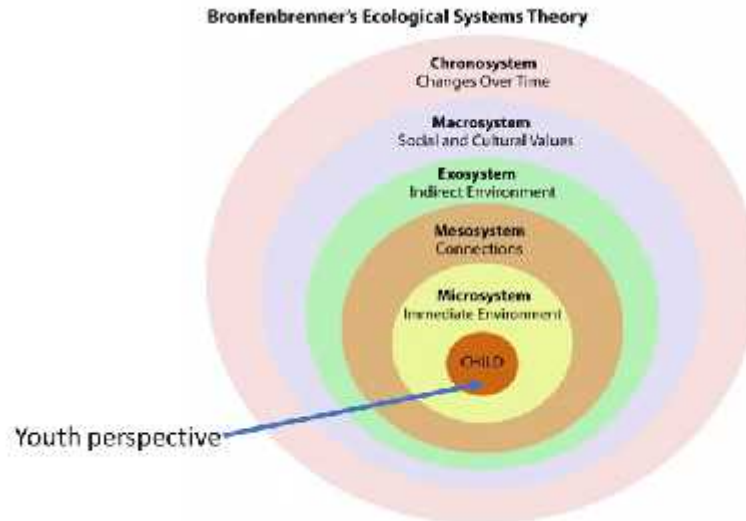


Figure 2. The social-ecological model
 Image adapted from Bronfenbrenner (1974) by *Psychology Notes HQ* (2013)

Indeed, we are perhaps still far from the realization of understanding the entire system which Native American youth in this community inhabit. Yet here in this project, we may be able to shine a light on the youth perspective. The overlaid arrow in Figure 2 demonstrates our fundamental gap in understanding how the youth perspective of mental health and wellness may better inform a program offering mental health care and social support programming. The review of the literature in Chapter II delves more deeply into the work of Native American scholars relating to the legacies of colonialism, the conceptualization of historic trauma, and the more recent evolution of the strengths-based approach to providing care and supporting Native youth in the contemporary rural tribal setting. But these points are made here because they are relevant to a key conceptual model.

Specific Aims

1. To use grounded theory to analyze data gathered during and after the photo-elicitation phase from 41 interviewees, and to identify common themes by youth (in three adjacent

- age ranges of 9 to 11 years, 12 to 14 years, and 15 to 17 years) in order to generate a theory of how youth identify their own concept of mental health and wellness.
2. To use grounded theory to analyze and then generate a theory of whether participants (in three adjacent age ranges of 9 to 11 years, 12 to 14 years, and 15 to 17 years) tie their concepts and narratives of mental health and wellness to specific elements in their lives, and whether these elements are reflected on as intrinsically positive or negative.
 3. To review the raw data using a grounded theory approach to understand how participants use the photo-elicitation method to represent their concept of mental health and wellness; to review the raw data using a grounded theory approach to uncover what types of testimony youth use to express themselves.

Research Questions

1. What are the common themes and narratives that emerge when Native American youth living in a plains tribe rural community (of three adjacent age ranges of 9 to 11 years, 12 to 14 years, and 15 to 17 years) investigate their own concept of mental health and mental wellness?
2. How do youth in three adjacent age ranges (9 to 11 years, 12 to 14 years, and 15 to 17 years) link their concept of mental health and wellness to other elements in their lives? Are any of these elements identified as intrinsically positive or negative?
3. What are the typical types of expository dialogue/narrative that eventuate when concepts of mental health and wellness are discussed following the photo-elicitation method? Are some types of expository dialogue/narrative more common than others (e.g., metaphor, analogy, lived experience, shadowed data)?

Significance

This descriptive research project looks to push forward our understanding of how participatory photo-elicitation can be used to explore health-related concepts that are not easily made into photographic images. For example, one's strengths—be they related to mental or physical health—are hard to capture photographically, so composing an image requires reflection that then may be brought to a mutual understanding through the participatory elicitation phase. Catalani and Minkler (2010) made a key review of the many health promotion research projects that have utilized both the photovoice and photo-elicitation methods to expand awareness and understanding, highlight community assets, help better frame a health problem, facilitate advocacy on a broad scale, or empower individuals to make personal changes in favor of healthier outcomes. Despite this, there seems to be a dearth of examples of how mental health and wellness concepts are represented in participatory photo-elicitation processes. Photovoice research projects are very often linked to outcomes that seek to inform policy through community advocacy.

Health promotion scholars have contributed to a vast body of work on CBPR (Israel, Eng, Schulz, & Parker, 2013; Wallerstein et al., 2018a), and the increasingly popular method of pursuing CBPR through photovoice (Catalani & Minkler, 2010; Johnston, 2016; López et al., 2005; Vaughn, Rojas-Guyler, & Howell, 2008; Wang, 1999; Wang & Burris, 1997; Wang & Pies, 2004). The pursuit of CBPR through photovoice often involves a stepped approach such as the "SHOWeD procedure" (Bowleg, 2017; Catalani & Minkler, 2010; Wang & Pies, 2004; Wang & Redwood-Jones, 2001) for framing health problems and encouraging the follow-through of local advocacy campaigns that address the identified problem in a community setting. However, the SHOWeD procedure is not ideal for grounded theory research which investigates wellness strengths from the participants' perspective rather than health problems. Far fewer publications

detail how participatory photographic creation and the elicitation of dialogue through created images specially blend with the tradition of grounded theory procedures (López et al., 2005). Fewer still focus on how children of different ages and development react to photo-elicitation. Thus, a very basic quality to participatory photo-elicitation is often overlooked in larger photovoice procedures. There is an opportunity in this project to explore whether participatory photo-elicitation, when blended with the grounded theory research approach, presents opportunities that make raw data about challenging, multidimensional health topics more valid, sensitive, and tailored to the specific needs of the people the research serves.

Whilst the actual photos are not the end products of this dissertation, the de-identified discussions and the photos themselves may serve the Fort Peck Tribes HP/DP administration for generating future participatory approaches as a means of involving youth in mental health and wellness initiatives. Separately, whilst the photos themselves were not analyzed here, the HP/DP program may wish to ask its participants if their photos may be used for further iterative participatory investigation into mental health and well-being. Specifically, if participants agree to the further use of their photos, these images could be employed by the Health Promotion and Disease Prevention program as exhibition material for public mental health promotion, or in key social marketing health campaigns on platforms such as Facebook and Instagram to raise awareness about mental health and wellness. This may only occur if the participants agree to the further use of their created photographic images.

Definition of Terms

American Indian and Native American - used interchangeably to describe the people of the continental United States who are not of Alaskan Native or Hawaiian origin but are the original inhabitants of lands now within the U.S. borders. The descriptor “Indigenous” is used

often to describe scholars, many of whom are Native to their land or are aboriginal people who live in places that have been colonized. Some Native American scholars distinguish themselves from Indigenous peoples because they are the descendants of Native people who have been displaced from their original tribal lands and forced to other lands through atrocities and the creation of the reservation system, which Gone (2007) referred to as “reservation captivity” (p. 356).

Northern Plains Tribes - describes the ethnicity of tribes that occupy the northwest and western plains regions of continental United States.

Reservation - federally designated lands within the bounds of the United States that represent the main place of a sovereign tribal group, but do not necessarily reflect the original places of the current Native American inhabitants prior to colonization, war, and displacement.

School-Based Health Clinics (SBHC) - health clinics that are inside the walls of a school. These clinics in the setting mentioned in this research project offer primary care, wellness counseling, mental health therapy, and other services such as vision and oral health screenings.

Health Promotion and Disease Prevention (HP/DP) Programs in Indian Country - a Native-operated health entity. For the community identified in this research project, the HP/DP is also a health service provider as well as a community entity that organizes activities and partners with outside organizations and institutions to bring programming for social support to its population on the Fort Peck Tribes reservation.

Mental health - used interchangeably with mental health and wellness, or mental well-being, except when it is used with modifiers in a specific phrase to explain the lack of wellness or the presence of problems that help elucidate threats to mental well-being, e.g., mental health issues, mental health struggles, mental health problems, mental health diagnosis, and mental health illness.

Global mental health - an emergent field which aims to address disparities in mental health care, care quality, and knowledge as a world-wide movement across public health institutions, practitioners, and health promotion experts that recognizes the importance of mental health and wellness as a construct to living a healthy life. The World Health Organization (WHO) has been a proponent of the Global Mental Health (GMH) movement and research stance.

Delimitations, Investigator Experience, and Stakeholders

There were choices made at the inception of this research which should be mentioned. These choices also reflect the boundaries set for this doctoral dissertation. This research did not employ any type of assessment of individuals of this target population. This research also did not look at or analyze individual mental health outcomes or trajectories. This research does not purport to stand in for group therapy, one-on-one counseling, a full program audit, a comprehensive evaluation, or an evaluative judgement of any kind. This research was aimed at building a base of knowledge to answer the key questions stated above and may be used as a formative inquiry to address questions of special interest to the program leaders, care providers, and stakeholders in the community, including the participants themselves.

Delimitations

Many health workers in Native American community health centers have expressed concern that all children would, to some extent, screen positive for trauma or traumatic experiences (Hiratsuka et al., 2016). Indian American mental health advocate and researcher Dr. Maria Yellow Horse Brave Heart (1998, 2003) has pointed to historical trauma as a poorly understood factor in approaching new frameworks for mental health services and treatment for Native individuals presenting with mental health problems and addictions. To address this

sensitive issue and to formally utilize the strengths-based approach as well as the community-based participatory orientation in interviewing participants, the investigator was guided by co-investigator clinical psychologist Dr. Kayt White Bird Orange, who was present to offer support to children during the data-gathering phase. She has served this population for more than a decade and continues to provide mental health services through the HP/DP program of Fort Peck Tribes. Also joining this research effort as co-investigator for the data-gathering phase was a local school educator, Mr. Coy Weeks, who has his Master's in child development. Importantly, Mr. Weeks is Native American, grew up in this community, and is an affiliated member of the Fort Peck Assiniboine and Sioux Tribes. Also advising and informing the investigators was Dr. Dennis Norman, a clinical psychologist who is Native American and has worked with Native American communities to improve overall health care and well-being for several decades through the Harvard University Native American Program (HUNAP).

In past CBPR projects, investigators have also conducted a post-hoc analysis revealing to what degree participatory investigation took place by examining the methods of the research, the degree to which the research was participatory, and the number of community members participating. This type of analysis asks key questions, such as to what degree has the design of the research itself eventuated from community participation. This type of post-hoc analysis was not part of this dissertation research project plan. However, a participation analysis may be conducted using the data gathered here, as well as key documents, field notes, emails, and memoranda between the investigator and co-investigators, Fort Peck Institutional Review Board (IRB), and HP/DP leadership.

Investigator Experience

I am CITI certified and that training is affiliated with Teachers College. I have conducted past human subject research and engaged in human subjects training during my previous two

Master's degrees: Ed.M. in human development and psychology (2015) and A.L.M. in biology (2013), from Harvard University. My extensive work with national news media as an overseas correspondent prior to academic study lends itself to this and other competencies, including more than a decade of working successfully with diverse groups, working on politically and culturally sensitive topics, and having a strong personal sense of cultural humility. Since 2013, I have taught courses with a heavy focus on ethics in clinical trials documentation processes for the Regulatory Affairs program at Northeastern University. My current doctoral studies in Health Education indicate that I have been engaged in coursework that addresses training for health promotion, human subjects research ethics for the participatory orientation, social marketing, advanced statistics, and methods classes.

Stakeholders

The major stakeholders were the leaders, providers, and health promotion experts in this native-operated HP/PD programs who directly engage with the youth through school-based mental health care provision and social support activities. A key motivation for this work was to help inform the practice of mental health and social support for this Native American community HP/DP program and perhaps other similar fledgling programs dotted around Indian country.

The growth of the HP/DP program in Fort Peck Tribes and its ability to increase access to general care and specialized care became possible in part because of new funding streams that came through the Indian Health Care Improvement Act (IHCA), section 402, which allows tribes and tribal organizations to purchase health coverage or to sponsor insurance premiums. The IHCA was made permanent by the Patient Protection and Affordable Care Act (ACA), yet because the future of the ACA is unknown, the legacy of these major structural changes—allowing tribes to engage in health care provision (beyond 638 contracting) and capture public

insurance payments through both the Obama era ACA and the extensions to Medicaid—is also uncertain.

Some may conclude that the future of the IHClA is also in peril, but others argue this might not be the case. This model of care delivery, whereby tribes or tribal members are both owner and operator of primary health provision and outpatient specialized care provision, is a key evolution, is supported by leadership at IHS, and is complementary to services provided at existing IHS facilities.¹ There is some indication that this expansion enjoys bipartisan support, and many believe the IHClA renewal is permanent and will continue even if the ACA faces certain demise.

A Nixon era law—the Indian Self-Determination Act, known as P.L. 93-638—promised to transfer all federal tribal programs out of federal control and into tribal control, however, this was not realized before the Self Governance Amendments of year 2000, P.L. 106-260 (Satter et al., 2014; Shockley, 2013). Together, these laws serve to change the structure of health delivery so that any health services by the IHS over which a tribe wishes to assume control can be accompanied by direct federal funding instead of transfers through IHS facilities (Satter et al., 2014). The 638 transfers mentioned previously are known as contracting agreements, whereas the 260 law and changes to health funding are referred to as compacting agreements (Satter et al., 2014).

For health education and health promotion scholars who may be less familiar with the IHS hospital and care provision model, the legacies of colonialism, health sovereignty efforts, and details about the past, current, and future of care, the reality is both nuanced and

¹ This sentiment is not always shared by IHS staff, however, as some feel that new tribally operated health providers pose a threat. For example, new tribally operated facilities may be seen as competing for the same Medicaid/Medicare dollars as the local IHS facility. Many believe that the growth of health services outside of IHS will lead to losses of permanent positions or services within the IHS facilities (Smoker, 2015). Other tribal leaders may also perceive health leaders as newly endowed, non-elected power brokers.

overwhelming. To summarize and simplify, we may consider three major processes that are underway across Indian country. On the local level, HP/DP programs and other Native-owned care and wellness centers are addressing structural racism by instituting care that is both Native-owned and Native-operated. On the regional level, more Native American health leaders are engaged in collective bargaining, negotiation, and collaborative efforts for group lump-sum coverage through state Medicaid/Medicare insurance or other public insurance payments such as the CHIP programs. On the national level, organizations that represent tribal interests, such as the National Congress of American Indians (NCAI), are lobbying or using other means such as judicial efforts to maintain the permanent renewal of the IHCIA.

II – REVIEW OF THE LITERATURE

This review of the literature identified three areas that are key to informing this research and the research approach to this project. The first area reviews the crucial works of Native American scholars who have built models and theories that help scholastic (and non-scholastic) audiences understand mental health in terms of marginalization, historic trauma, multigenerational trauma, and, more recently, the “strengths-based” approach to culturally driven health interventions, nation building, and decolonization processes. These are taken as a counter-narrative to the many studies that have portrayed Native America youth through the lens of health disparities, with little attention to youth strengths, or the legacies of unresolved trauma. The second area reviews key writings about adolescent development as it pertains to youth generally, and specifically to Native youth. Finally, the third area of this literature review summarizes the health promotion and behavioral health literature as well as the methods and their legacies as they are instrumental to the field of health promotion, and specifically this research project. From this narrative review, the investigator has identified a gap in the literature that was addressed by this doctoral research project.

Building on Native Narratives, Research, and Literature

Native populations of the plains tribes in North America have endured many atrocities through colonization (Adams, 1995; Gone & Alcántara, 2007; The Harvard Project on American Indian Economic Development, 2008; Stannard, 1993). Joseph Gone (2007), a citizen of Gros Ventre tribal nation in Montana, has written extensively about the intersection of western style mental health intervention and traditional healing. He is also a professor of psychology (clinical area) and a prolific writer who captures the legacy of colonization and the indigenous

experiences of mental health. Together with Carmela Alcántara, who is an Associate Professor at Columbia University School of Social Work, (although Gone's doctoral student at the time), the scholars wrote this:

This nation's tiny but diverse population of American Indians and Alaska Natives has endured centuries of colonial peril. Indeed, historical encounters of Native peoples with European Americans in the United States all too frequently involved military conquest, reservation captivity, assimilation campaigns, resource theft, and numerous other dangers, both mortal and ideological. These experiences—some of which persist to this day—have collectively established and transformed the psychologies of contemporary tribal peoples, in many instances complicating, compromising, and confounding “mental health” in these communities. (p. 356)

Notice Gone's and Alcántara (2007) use of quotation marks around “mental health” as the phrase itself connotes a perspective that health in one's mind is somehow separate from one's physical health. Separately, Gone (2007) and other scholars, have written about their western training in clinical psychology, explaining how partitioning mental health from physical health is not an indigenous perspective, but one associated with the westernized paradigms of health, and care delivery (Duran & Firehammer, 2016; Gone, 2007; McCabe, 2016; Menzies, 2010). The sequela of Gone's and Alcántara's (2007) description of “colonial peril” (p. 356) may be most familiar to health promotion experts through the mental health lens (also see Kirmayer et al., 2014), the feminist lens (Smith, 2005), the economic lens (Kalt & Singer, 2004), the policy lens (Warne & Frizzell, 2014), and a gaze that analyzes the psychology of post-colonial societies (Duran & Duran, 1995; Gone, 2013; Smith, 2013). Importantly, Gone's (2007) summative statement above highlights decolonizing strategies that may be incongruent with academia and clinical mental health knowledge based on western rather than indigenous philosophies (Mihsuah & Wilson, 2004; Walters & Simoni, 2009; Wilson, 2004; Wilson & Bird, 2005).

A growing body of health promotion research addresses the influence of structural racism (Wolff et al., 2016) as a blameworthy determinant of health. One does not have to look too far to find examples of how structural racism confounds physical and mental health in the

U.S. The past and present situation of federal health care underfunding to the Indian Health Service (IHS) is by many measures just another colonial atrocity and a breach of treaty (The Harvard Project on American Indian Economic Development, 2008). Very often, Native Americans struck by treatable diseases of chronic, behavioral, or infectious origin also face limited access to care, specialized care, and preventive services because IHS facilities are understaffed, underfunded, and lack resources common in other non-IHS hospitals (Johnson, 2008). However, in looking to the root of ongoing structural racism, many might argue that colonization, past and present, is one way to approach an understanding of the enormity of the trauma and structural racism that so deeply affects health.

Native American scholar and clinical psychologist Eduardo Duran, who wrote *Healing the Soul Wound: Counseling with American Indians and Other Native People* and an earlier work co-written with Bonnie Duran (*Native American Postcolonial Psychology*), has been a key proponent of explaining this in terms that the “academy”—which in the United States is largely composed of western and westernized scholars—is likely to absorb and fold into its own perspectives. No doubt, the terms *historical trauma* and *soul wound* were new to many readers of Yael Danieli’s edited chapter book. Chapter 21 of the Danieli (1998b) book, written by Duran, Duran, Brave Heart, and Yellow Horse-Davis, was likely the first introduction that many clinically-trained mental health practitioners and mental health promotion workers had to a description of trauma that went beyond their learning from the *Diagnostic Statistical Manual (DSM)*. Indigenous scholar Menzies (2010) explained how so much was missing from the *DSM* categorization of individual trauma that most classically trained mental health workers might miss the major issues many communities face. “This diagnosis [of DSM’s trauma] ignores the role of culture and intergenerational or community trauma and does not connect the

individual's experience to broader, systemic conditions that perpetuate and exacerbate the individual's experience" (p. 68).

Health promotion workers who know and use the term *historical trauma* perhaps become most familiar with Yellow Horse Brave Heart's (1998, 2000) writings on the unresolved grief of the Lakota Indians, which followed Danieli's book. The strength of Danieli's (1998b) edited chapter book is that it offers so many rich case studies of the multigenerational transmission of trauma within many different contexts and populations, including survivors of the Nazi-led Holocaust in Germany as well as intergenerational transmission of trauma among Indigenous survivors of the brutal Canadian school systems. The chapter by Marie-Anik Gagné (1998) takes a critical look at the legacy of colonialism and the many traumas inflicted on the First Nation peoples of Canada and Native Americans in the United States through the experience of attending boarding schools. But a wider theme is one of how key insights into healing (Danieli, 1998a; Gagné, 1998) may be best understood through exploration that continues with Indigenous and Native American scholars (McCabe, 2016; Menzies, 2010).

The concept of "historical trauma," "intergenerational trauma," "soul wound," and the related terms "spiritual injury, soul sickness, soul wounding, and ancestral hurt" (p. 15), explained by Duran (2006), who described a processes whereby unresolved trauma not only is passed from one generation to the next, but also becomes more severe with each generation it affects (p. 16). These ideas and their related treatments harbor elements of both mental and physical health, Duran (2006) testifies how he may use the word "soul" or "psyche" (p.47) interchangeably when helping clients with described challenges of interpersonal violence and intergenerational transmission of abuse (Duran, 2006). Writings from Gagné (1998) and Yellow Horse Brave Heart (1998, 2000) have offered a crucial scholastic discourse that trauma from war, displacement, atrocities, persecution, and continued injustice remains largely unresolved.

Furthermore, healing cannot come by simply increasing the availability of mental health care counseling, therapy, and psychiatric treatments that are western-based medical practices, as these can be just as harmful as the identified trauma and thus counterproductive, according to Duran and Duran (1995).

The restoration of both mental and physical health will likely come with social justice (Smith, 2005); identity renewal or creation (Gone, 2013; Kirmayer et al., 2000; McCabe, 2016); Indigenous knowledge recovery and empowerment (Airhihenbuwa, 1994; Wilson, 2004); and the return of culture, ritual, traditions, and spirituality (Gone, 2013; Kirmayer et al., 2014; Walters & Simoni, 2002, 2009; Walters, Simoni, & Evans-Campbell, 2002; Wheeler, 2001; Yellow Horse Brave Heart, 1998, 2000). Duran (2006) also argued that the care setting is not always a place where healing transpires because “dysfunction in healing institutions is perpetuated by hiring and retaining staff who are not culturally competent and through the implementation of strictly Western medical models of treatments, which maintain the process of colonization” (p. 25).

In the care setting, mental health providers might initially struggle to understand how historical trauma relates to their clients (Menzies, 2010), even if they (the providers) themselves are Native American but were trained in western traditions of medicine, psychology, and psychiatry. Gagné (1998) and Kirmayer et al. (2007, 2014) have sought to help both practitioner and scholars better visualize the transmission of intergeneration trauma; these key efforts have resulted in the following charts (see Figures 3 and 4). Both of these charts are reminiscent of Bronfenbrenner’s (1974) social-ecological model in that they offer the many layers that explain social and ecological systems as not only immersive but also as transmittable (Bronfenbrenner, 1986b, 2004). Indeed, Gagné (1998) and Kirmayer et al. (2007, 2014) illuminated the environments that affect quality of life and development.

A casual inspection of Figure 3 reveals that Kirmayer et al. (2007, 2014) chose to represent the continuation of traumatic life events, perhaps offering a guide for those unfamiliar with historical trauma. The creation of this chart was also a validating exercise, according to the authors: “One function of making these historical parallels has been to recognize and valorize Indigenous peoples as victims of violent oppression at the hands of European colonizers and their regimes” (p. 303).

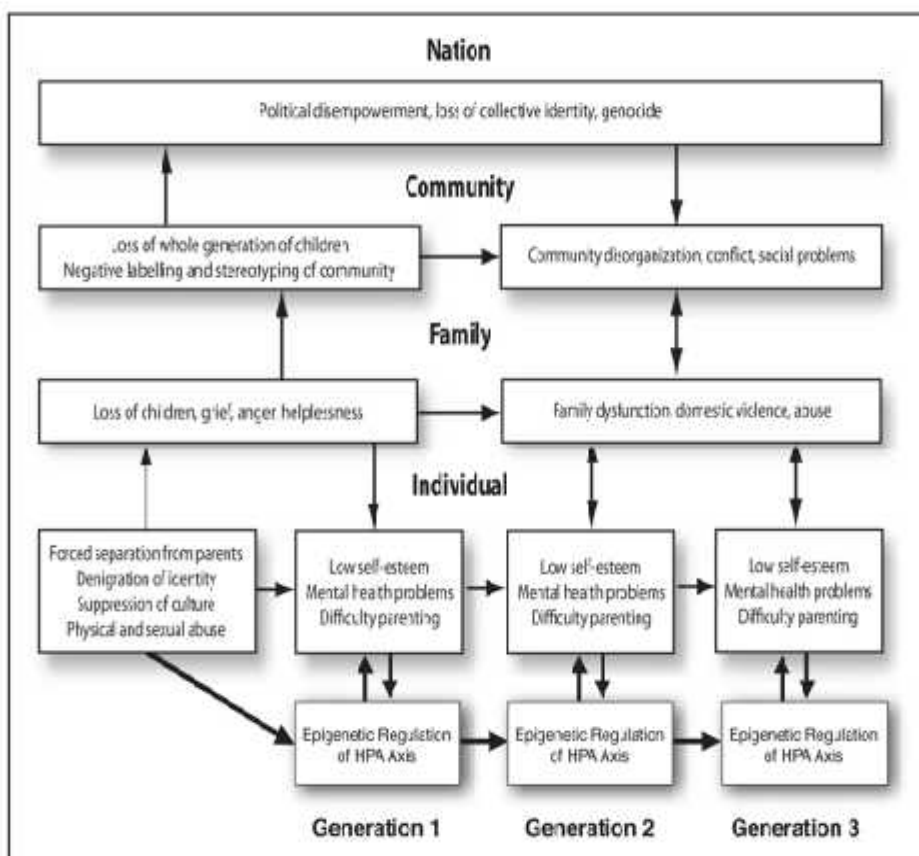


Figure 3. The transmission of historical trauma

From Kirmayer, Gone, & Moses (2014), *Rethinking historical trauma*, Kirmayer, L. J., Gone, J. P., & Moses, J. (2014). *Rethinking historical trauma*. *Transcultural Psychiatry*, 51(3), p. 303.

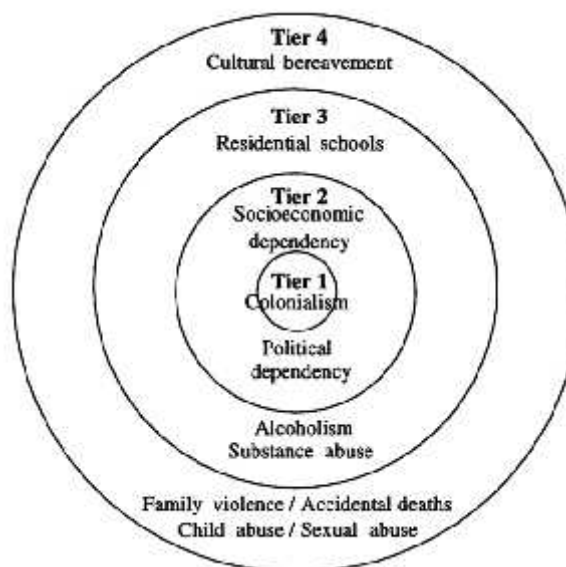


Figure 4. The cycle of traumatic events

In Gagné (1998), *The role of dependency and colonialism in generating trauma in First Nations citizens: The James Bay Cree*. In Danieli (Ed.), *International handbook of multigenerational legacies of trauma* (p. 356)

Many scholastic narratives in this translational area of mental health care come from Indigenous academics in Canada and elsewhere. To highlight only a few, Indigenous scholar Menzies (2008) who wrote on Indigenous mental health in Canada surmised scholarly writing from fellow academics. For example, Root (1992) wrote about an “insidious” trauma among Indigenous populations; Dutton (1998) wrote of a “matrix of traumatic experiences” (p. 1); in a study of aboriginal communities; Kirmayer et al. (2000) suggested that traumatic events were “inscribed” or built into relationships, practices, and institutions (Kirmayer et al., 2000; Menzies, 2008). A recent book edited by Stewart, Moodley, and Hyatt (2016) presented four directions for the integration of Indigenous cultures into mental health counseling (Garrett et al., 2016). Karina Czyzewski (2011) wrote of colonialism as a determinant of health in the *International Indigenous Policy Journal*. These narratives all come from the wider North American Native

American and Indigenous experience and beyond; together, they may inform translational research and mental health practice across Indian Country.

The strengths-based approach suggested by several Native American scholars (Bartgis, 2016; Garrett et al., 2016; Stewart et al., 2016; Yellow Horse Brave Heart et al., 2016) for researching and enhancing youth mental health and wellness should not be confused with the investigative traditions and “metatheory” (p. 307) of resilience and resiliency research characterized by Richardson (2002), which will be discussed in upcoming sections.

Native American Youth and the Existing Literature

Gone (2016) wrote the following passage in the preface of the Stewart et al. (2016) book *Explorations in Mental Health*, offering insight into health counselors practicing in Indigenous communities.

Mental health is a vital aspect of overall health for Canadian Indigenous peoples. However, Indigenous cultural understandings of mental health and healing are distinctly different from understandings that have prevailed in most North American mental health provider settings, including counselling contexts. (p. xvii)

Gone’s (2016) writing is important because it offers perspective on a body of work that is dominated by research outlining risks and disparities. Furthermore, he described how policies and practices of the “psy-disciplines” (p. vii) are deployed by government-funded programs in the clinical setting, making “substantial inroads within Native community life” (p. vii) a reality that many Native scholars see as the continuation of colonial and assimilation practices shunning Native healing techniques. Indigenous scholar Waterfall (2016) lamented how “prior to colonization, traditional Indigenous healing practices were carried out organically through grassroots kinship systems of relationships” (p. 5). The clinical setting as the new place of healing and the research on mental health not only come with an undeniable colonial legacy,

but with health research that has also emphasized pathology over strengths (Duran & Duran, 1995).

Often, the mental health of Native American youth is discussed in connection to health problems. Blum, Harmon, Harris, Bergeisen, and Resnick (1992) named severe emotional distress, substance use, alcohol dependence, suicide risk, and other “factors” (p. 1637) that serve to highlight health disparities. Public health scholars inform us that American Indian youth suffer the highest rates of suicide attempts and completions (Barnes, Powell-Griner, & Adams, 2005; Beals et al., 2005). Literature reviews published about Native American youth and mental health centered on the risks of suicide (Alcántara & Gone, 2007); available interventions for preventing Native youth suicide (Gone & Alcántara, 2007); the prevention of risk behaviors such as drug and alcohol use (Beals et al., 2003; Whitesell & Kaufman, 2017); teen pregnancy (Kaufman et al., 2007), and accidental death (Borowsky, Resnick, Ireland, & Blum, 1999; Gone & Alcántara, 2007; Taylor, Anderson, & Bruguier Zimmerman, 2014). The above literature reviews all mentioned protective factors, but importantly, these are no standalone factors. Many factors are tied to what Indigenous and Native American scholars explained is part of the decolonization process.

Outside of the literature that looks specifically at youth, studies of Native American mental health show large inequities. A comparative study of mental health outcomes in the general U.S. population using the National Comorbidity Survey (NCS) and a culturally validated survey of Indigenous populations in the U.S. (excluding Native Hawaiian populations) found that lifetime rates of three anxiety disorders (panic disorder, generalized anxiety, and PTSD) were elevated in both Indigenous men and women, as compared with the wider U.S. population (Beals et al., 2005).

Although Indigenous health outcomes vary greatly between and within tribes, clans, and regions, generally Native Americans have a lower life expectancy and all-cause morbidity and mortality than national averages (Jones et al., 2011). The Centers for Disease Control and Prevention (CDC) publishes reports using the latest available census data to make inferences about health statistics reflecting the health outcomes among American Indian and Alaskan Natives within the U.S. territories. These publications detail specific disparities in the burden of diabetes (Joseph & Golden, 2017), cancer (Willman, 2017), smoking (Jamal et al., 2015), childhood injury-related death (CDC, 2003), and mental illness (Beals et al., 2005). Solomon and Randall (2014) highlighted how common it is among Native Americans who suffer from chronic disease to suffer also from related depression (p. 31). Indeed, in conversations with the director of the Fort Peck Tribes Health Promotion and Disease Prevention program, Kenneth Smoker (2017) repeatedly emphasized how mental health touches all aspects of health for the program's area youth.

Caution is also needed, however, scholars studying mental health and other health issues in Native American communities must be careful not to universalize the Native American youth experience. News media stories such as *The New York Times* piece by Evelyn Nieves (2007) who wrote about "waves of youth suicides and attempts," tell of desperate plains tribes youth and the desolation of reservation life. Perhaps the article raises awareness of the potent mix of past and ongoing adversity, the lack of resolution of historical trauma, and underfunded health care. But, this news media article demonstrates how easy it is to tell just one side of Native American youth mental health.

The next section explores how health promotion experts might avoid thinking about Native American youth in terms of universalities derived from the "disparity" perspective, or from only the Western perspective of child development. Indeed, this is the gap that this

research project hopes to address in part by informing us of the perspectives of the child, but importantly by also offering communities an expanded view of methodology that is community-based and adaptable to health program needs.

The Study of Adolescent Development

Many authors emphasize how important it is to appreciate the great diversity of Native Nations—there are over 460 federally recognized Nations, but many more Nations have had their sovereign status eliminated through colonization and federal laws (The Harvard Project on American Indian Economic Development, 2008). Thus, the idea that developmental psychologists could ever generalize across Nations would be ill-advised as Nations are very diverse and vary in their cultural practices, spoken language, resources, emphasis on youth transitions, rituals, and traditions (Gone & Alcántara, 2007). Bronfenbrenner introduced the ecological system approach to human development in the 1970s (Sharma, 2016). An oft-used analogy to describe this approach is an onion with its many layers (Bronfenbrenner, 2004). The ecological approach tells us of systems nested within systems, which are again found within a wider system. Indeed, this ecological framework gave scientists interested in human development and health promotion improved ways of thinking about environmental conditions, social relationships, and other immersive factors that affect the development and health of an individual over time.

In the fourth edition of Gauvain and Cole's (2004) book, the process of change, which we acknowledge as human development, "emphasizes the coordination of the biological, social and cultural aspects of human experience" (p. 1). This is not a recent way of thinking about human development or health, warn other scholars. Rather, development as we know it from the body of scholastic literature is the western digestion of ideas. Ideas that reflect social and

ecological systems approach to human development have been common to many cultures for centuries, especially Indigenous cultures, according to Bartgis (2016):

First, strength-based approaches to health and wellness in tribal communities are not new, but are embedded in diverse tribal best practices, established by systematic observation over centuries, that have been passed down orally from generation to generation.... Second, unlike Western health beliefs, tribal worldviews recognize the “whole” person within the context of the environment and implement tribal best practices that are holistic in approach, including the entire family and spirituality. (p. ii)

Developmental psychologists Roth and Brooks-Gunn (2004) lament that often research on adolescents and policy statements regarding adolescents and their development tend to be “problem-oriented, stating that one of the main purpose of the programs aimed at adolescents is simply to keep them out of trouble” (p. 358). There are many examples, past and present, in which thinking has approximated an instruction book of how to make adolescent development a *successful* enterprise, versus a less desirable one. Researchers such as Fisher and Weinberg (2000) present “ingredients” for a “successful development” (p. 359) as the five Cs (Roth & Brooks-Gunn, 2004). Roth and Brooks-Gunn (2004) summarized the five Cs as follows:

These positive attributes encompass: competence in academic, social, and vocational areas; confidence or a positive self-identity; connection to healthy relations to community, family, and peers; character or positive values, integrity, moral commitment; and caring and compassion. The focus is on wellbeing, rather than just on problems.
(p. 360)

This passage also begs the question of whether we should ever assume these “ingredients” are universal. The epistemological stance of this project is that we should not and cannot rely on developmental literature’s universality of ideas, instead we must center the research on the child’s perspective gained through the grounded research approach to learn of their own—for want of a better word—“ingredients” for mental health and wellness.

A quick and rudimentary search of the terms *adolescents* and *Native American* or *Indigenous* (by no means a systematic exploration) returns dozens of papers about interventions

for measuring or preventing alcohol use, suicide, chemical dependence, and teen pregnancy. In this quick exploration, many papers mentioning healthy development referred to programmatic participation by Native American youth rather than understanding adolescents historically, developmentally, and holistically. A great many papers about adolescents living in Native American and indigenous communities seeks to keep young people from harm whilst emphasizing threats to health, or are focused on measuring interventions that seek to mitigate these threats. Recently, Yellow Horse Brave Heart and colleagues (2016) describes how this research may be taken as the “pathologized approach.”

We recognize the disjuncture between AI/AN culture and the predominant present-based, individualistic, and meritocratic (i.e., "pulling yourself up by your bootstraps") models and explanations for the behavioral health disparities among AI/ANs and the general U.S. population. Supporting research that advances treatment approaches that are Indigenous, contextual, and systemically informed may help shift discourse away from individualistic and pathologizing explanations for disparities. (p. 43)

Native American, and non-Native scholars may be uncomfortable with the pathologizing of adversity and its links to disparity. Despite this, recent research continues to receive positive attention and little criticism. For example, “toxic stress,” coined by Shonkoff (2012), describes the deleterious and sometimes epigenetic effects of acute and chronic stress on human brain development in the pre- and post-natal periods, which may have lasting effects on later childhood development (Shonkoff et al., 2012). Shonkoff et al. took a pediatrician’s approach to identifying and educating the public about the perils of so-called toxic stress in his summative writing:

What are the biological mechanisms that explain the well-documented association between childhood adversity and adult health impairment? As these causal mechanisms are better elucidated, what can the medical field, specifically, and society, more generally, do to reduce or mitigate the effects of disruptive early-life influences on the origins of lifelong disease? When is the optimal time for those interventions to be implemented? (p. e233)

Above, Shonkoff et al. (2012) seemed to suggest throughout his writing that once we know and understand these “biological mechanisms,” we can then simply address them with “interventions” (p. e233). However, the follow-up “toxic stress” literature has done little to advance health promotion, health education, or intervention studies directly, indeed, the toxic stress body of research is powered by funding for a better understanding of how poverty may generally influence cognitive and neurological development, which is scientifically important. Yet this literature is not immediately translatable to health promotion, nor does it offer insight as to how to mitigate toxic stress caused by trauma that is historical and intergenerational. Indeed, the current iteration of the toxic stress paradigm may fall into a category that Kirmayer, Gone and Moses (2014) deem “fashionable forms of biological reductionism” (p. 309). Kirmayer et al. (2014) surmise these ideas:

The temptation to participate in fashionable forms of biological reductionism may not serve the emancipatory goals of Indigenous decolonization (Kirmayer and Gold 2012). There is no reason to assume that epigenetic mechanisms—which appear to be reversible with appropriate life experiences—would not operate in service to intergenerational resilience as much as to intergenerational trauma. (p. 309)

Despite this discussion, or perhaps because of it, there appears to be more work describing the very positive commonalities when adolescent development is explored through culture, tradition, and identity formation. This is emphasized in academic writing about health and the psychological concept of resilience (Wexler, 2014), as well as in descriptions of protective factors often identified as culture, tradition, and spirituality and their “protective” affects to specific threats of suicide and mental illness (Alcántara & Gone, 2007; Beals et al., 2005). More recently, a study of social support in Iceland links the power of family, social capital, and the “Icelandic values of independence, cooperation, and roles for everyone” (p. 19) to protection against adolescent alcohol and drug use (Sigfúsdóttir, Thorlindsson, Kristjánsson, Roe, & Allegrante, 2009).

The resiliency field also offers widely accepted constructs of how some youth manage their adversity against all odds. These lines of inquiry might have limited relevance to Indigenous youth, warns Kirmayer et al. (2011) It would be a mistake to intuit at this juncture that the fields of research on resilience and resiliency (Richardson, 2002) overlap with the paradigm of the strengths-based approach (Bartgis, 2016; Garrett et al., 2016; Stewart et al., 2016; Yellow Horse Brave Heart et al., 2016). Understanding indigenous youth perspectives and strengths may inform care, social support programming and an evidence-driven agenda that may lend itself to greater cultural competency, for example, but these goals do not necessarily overlap with the investigative traditions, which Richardson (2002) described as the “metatheory” (p. 307) of resilience and resiliency research (Richardson, 2002).

The resiliency literature and the epistemological of studying “hardiness” in the face of adversity may be incongruent with an exercise of simple participatory perspective-taking by and for a rural Native American youth population. At the inception of research, where investigation and analysis of this project was planned so that it may draw heavily from the grounded theory orientation, we cannot, and should make any assumption about the youth perspective, or its congruence to common universalities uncovered by resiliency research. Indeed, we may later decide there are themes that align themselves to constructs such as “coping”—a common and well researched psychological paradigm—but for now we are putting those thoughts aside.

We might ask then, what does the human development literature tell us about adolescent mental health generally, and specifically about literature that relates to mental health and indigenous populations. Bartgis (2016) suggested principles that would be easily incorporated into a developmental approach:

Inherent in many tribal worldviews is the concept that *energy follows thought*. While the exact expressions, applications, and practices of this concept vary significantly from tribe to tribe, it has important implications for our collective work in public health. In effect, health and spirituality are not separated, but integrated.... I propose that the

energy we create in public health matters for addressing the health disparities of tribal peoples—both for those trying to recover from mental illness or behavioral conditions, and for the lives of all people through the expectations we set for them. (p. 358)

In a beautifully crafted chapter in *Indigenous Cultures and Mental Health Counselling*:

Four Directions for Integration with Counselling authors Garrett et al. (2016) details how Native

American humor plays a central role in the Indigenous mental health and the healing process:

“In Native tradition, one of the most powerful healing forces in existence is being able to be real

and being able to laugh with family, friends, and strangers alike” (p. 29). The chapter details

specific ways in which an individual might offer themselves up for a roast – or in the parlance

used to describe this as “a razz” (p. 29). This is a way in which fun-making gets initiated for the

stress reducing outcome of family and peer laughter. Understanding how humor enhances

mental health and wellbeing, perhaps seems so obvious that many western scholars of human

development believe that it does not need further illumination. Curiously, it is not clear why no

mention of humor is made in the entire five editions of Gauvin and Cole’s seminal edited book

Readings on the Development of Children (the five editions were published in 1993, 1997, 2001,

2005, 2008). Perhaps this reflects the paucity of information on the role that humor and

humility (a function of humor) play in the western models of child development. Perhaps it is

because in western-oriented literature, the consideration of humor, or positive fun-making,

often gets folded into “social support” or is associated with strong peer networks or close and

reliable interpersonal relationships which are given more weight and credence. Indeed, it may

be challenging, although not impossible, to study the uses and possible protective factors of

humor as they relate to child social support and other areas in a child’s life. Perhaps the

research in this project reveals more about this area of inquiry.

From Disparity Research to the Participatory, Strengths-Based Investigation

A growing consensus of academics argue that making investigations of disparities accomplishes nothing, especially if they do not explicitly acknowledge that the purpose of these comparisons is to strive toward better health and health equity (Bowleg, 2017; Braveman, 2014; Braveman, Egerter, & Williams, 2011). As Bowleg (2017) stated in a recent review piece, “the steadfast (and seemingly uncritical) reliance on the language of health disparities in U.S. public health circles to describe health outcomes that are clearly avoidable by reasonable means, and thus inequitable, reflects epistemological ignorance” (p. 678).

We may note a trend in health promotion and behavior studies that steers away from relentless comparisons of health outcome data, once so familiar to health disparities research, and instead acknowledges methodology that seeks to answer the important questions about the existence of the health inequity (Bowleg, 2017). But this has only come recently. In the early millennial years, academics in the field of health promotion began questioning the underlying understanding and use of the term *health disparity*, pointing out the many varying interpretations of the concept behind the wider understanding of inequities (Carter-Pokras & Baquet, 2002). Indeed, this was an era when both health determinants and resulting disparities became the focal drive of the national *Healthy People* decennial agendas for 2010 and 2020 that were emphasizing the many marginalized groups who continue to be underserved in the United States (Allegrante & Livingood, 2013; Chatterji, 2005; Green, 2012; Israel, Schulz, Parker, & Becker, 1998; Pronk, Hernandez, & Lawrence, 2013; WHO Commission on Social Determinants of Health, 2008). Typically, named determinants in the early millennial years included personal, social, environmental, and genetic factors; but by no means is this a finite list. The *Healthy People 2020* agenda further broke down determinants into “social determinants” which included resources, job opportunities, and social support, to name just a couple, as well as

“physical determinants” which included housing, schools, transport and other benefits, or perils of the built environment (*Healthy People 2020*, 2017).

This new context for examining determinants also came with a renewed sense of commitment to identifying the determinants of health in a more equitable manner. This meant engaging communities in health empowerment activities rather than top-down adherence to imported health promotion programming (Airhihenbuwa, 1994); utilizing participatory methods such as photovoice or asset mapping to encourage community-based investigation (Bowleg, 2017; Catalani & Minkler, 2010; Minkler, 2010; Vaughn et al., 2008; Wang & Pies, 2004); employing system-wide and population-based evaluation through consensus building (Livingood et al., 2011); adding capacity-building efforts for health care provision and leadership (Allegrante et al., 2009); and zeroing in on policy approaches for mitigating upstream threats to health (Brownson, Seiler, & Eyster, 2010). Despite this new appreciation of health determinants, literature published in the first millennial decade decried how mental health problems were barely recognized in marginalized populations (World Health Organization [WHO], 2001), or were stigmatized (Corrigan, 2004), undertreated (Kataoka, Zhang, & Wells, 2002), and—specifically in the United States—underfunded in rural indigenous groups (Gone, 2007) and in many other minority populations (Satcher, 2001).

Whilst *Healthy People 2010* called for the elimination of health disparities, *Healthy People 2020* better defined the health disparities through an updated concept of “health equity.” *Healthy People 2020* (2017) expanded key work aimed at health disparity elimination through “health equity goals” which call on advocacy for “improved health for all groups.” Health promotion scholars may ask: What does this mean for Native American populations, especially communities that have both historical experience of genocide and continued adversity from extreme human rights violations (Adams, 1995)? To answer this question, we

might observe that the concept of historical or intergenerational trauma (Duran et al., 1998) did not find a mention in the *Healthy People 2020* description, which instead offered the loosely interpretable notion of a “health disparity” as “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage” (Braveman, 2014, p. 6; *Healthy People 2020*, 2017). This characterizes adversity as multimodal but stops short of specifically acknowledging that young generations in some communities face specific adversity that is tied to past atrocities and perpetuated by the lack of acknowledgement, resolution, ongoing prejudice, and structural racism driven by these accumulated historical traumas.

This begs the question of whether it would be advisable to incorporate a definition of historical trauma into a national agenda, such the decennial *Healthy People* documents. Any incorporation of the idea would need to carefully avoid the promotion of generalized universalities about survivors and the progeny of survivors from war, atrocities, displacement—all of which are all elements of historical trauma. Airhihenbuwa (1994) warns field researchers away from the paucity of thinking that comes from discussion and the search for universalities. The following section outlines how the field of health promotion research has developed several methods that can only be carried out in a participatory manner, where the community is driving the research to fulfill its own health-improving needs.

CBPR, Photovoice, and Participatory Photo-Elicitation

Community-based participatory research (CBPR) for health promotion and disease prevention is an orientation to investigation that results in direct and possibly immediate benefits to participants (Wallerstein, Duran, Oetzel, & Minkler, 2018b). Wallerstein et al. (2018) explained that community-based empowerment strategies emerged directly from participatory action research, which found its roots in the Brazilian educator Paulo Friere’s (1970)

methodological work. As Wallerstein et al. (2018b) argue in the 3rd edition of *Community Based Participatory Research for Health*, CBPR values and principles guide co-investigators to partnership, however, the research should be carried out to an emancipatory end of tackling health equity goals (p. 9). A scholar of indigenous mental health and a trained clinical psychologist, Glen McCabe (2016) explained that research agendas should have a singular emancipatory focus: “One of the central discussions in and around the Indigenous community that has emerged recently centers on the idea that work with Indigenous people should be driven by a decolonization ethos” (p. 69).

CBPR relies heavily on participation across many levels of the community as well as the many stages of research. Ideally, all areas of CBPR research are guided by CBPR principles, from partnering with local co-investigators and hosting research to the analytic phases of research (Wallerstein et al., 2018b). When CBPR methodology is carried out to high standards, it is not only sanctioned, but is more likely to be embraced by the community itself. CBPR is well known for its acceptance by Native American communities (Parker, 2018; Tom-Orme, 2014), and indeed many indigenous communities and scholars have contributed to the development of CBPR theory and practice (Wallerstein & Duran, 2006, 2010; Wallerstein et al., 2018a, 2018b). Furthermore, health promotion experts have increasingly turned to evaluate the many inequities that so deeply influence the determinants of health by the people who are most affected; these individuals participate as investigators by employing a CBPR orientation (Bowleg, 2017; Braveman et al., 2011; Marmot, Allen, Bell, & Goldblatt, 2012; Marmot, Ryff, Bumpass, Shipley, & Marks, 1997).

CBPR projects have been carried out by many well-known health promotion investigators such as Meredith Minkler, Barbara Israel, Nina Wallerstein, and Bonnie Duran. These health promotion scholars are not only motivated by the promise of a better

understanding of health issues, but also by addressing structural inequities that underlie the health problems. Parallel to the research orientation of CBPR for health equity as justice is the motivation to use a strengths-based approach (Bartgis, 2016), because both are oriented toward the empowerment of participants and both encourage a participant as the investigator.

Photovoice is a method commonly employed for CBPR in which participants are invited to use photography to map community assets and investigate or define health issues (Catalani & Minkler, 2010; Palibroda, Krieg, Murdock, & Havelock, 2009). Wang, Cash, and Powers (2000) defined photovoice as “a process by which people can identify, represent, and enhance their community through a specific photographic technique” (p. 82). But the authors also emphasized the notion that photovoice is a good technique to make known the “struggles and strengths” (p. 81) of a marginalized population. An earlier definition of “photo novella” by Wang and other colleagues (1999) identified very specific goals, such as enabling people to “(1) record and reflect their community's strengths and concerns, (2) to promote critical dialogue and knowledge about important issues through large and small group discussion of photographs, and (3) to reach policymakers” (p. 369).

More recently, Johnston (2016) suggested that photovoice is best employed ahead of the policymaking process, not just for changing existing policy. The SHOWeD Method (Strack, Magill, & McDonagh, 2004) is an important adaptation that offers a structured way of eliciting conversation with questions that lead participants specifically toward thinking about change, either from within the community, on the policy level, or even on the personal level. Typical prompts from the SHOWeD method include: “What do you see here? What is really happening here? How does this relate to our lives? Why does this situation, concern, or strength exist? and What can we do about it?” (p. 51). The questions are meant to “progressively challenge participants to dig beyond the surface of the image” in an exercise that ideally prompts

discussion of causes for health problems as well as talk of resolving them (Strack et al., 2004): “Group discussions are a critical aspect of the photovoice process because they create opportunities in which participants can inspire each other to take better, more informative pictures; develop a collective voice; and mobilize for unified action” (p. 52).

However, the SHOWeD line of questioning is designed to evoke “change talk” or even “preparatory change talk” (pp. 159-161), which is a very specific type of testimony that may center on newly formed thoughts around potential decisions rather than pre-existing thoughts, ideas, and feelings (Miller & Rollnick, 2013). Many researchers working with the grounded theory approach, however, hope to reveal how prevailing attitudes give rise to indicators that inform categories and major themes from the elicited raw data. If researchers do wish to evoke change talk, instead of investigating prevailing attitudes, then the grounded theory approach may not be the best fit. Indeed, the grounded theory approach would not be a good match for the analysis for the raw data, or if the potential for change is something created by the lead investigator, thus tainting the raw data with something that would not ordinarily present during elicitation.

Perhaps phenomenological approaches are better matched to photovoice projects that seek to elicit the potential for change whilst also gathering raw data about how investigator-participants are asking themselves about the potential for personal, or community change. However, SHOWeD method may be especially mismatched for projects researching community assets, exploring sensitive issues that carry pre-existing stigma or, most importantly, evidence for existing personal strengths. Moreover, the SHOWeD method is made up of leading questions which are less than ideal for grounded theory research because the participants have been led in a direction toward evoking the language of change, and have not necessarily come upon change independently, or as a reflection that is unbiased by the researchers. In other words, the

SHOWeD method may obstruct the participants from testifying to prevailing attitudes, ideas, and thoughts because the prompts are very agenda-laden. It should be noted, however, that not all photovoice projects use the SHOWeD method.

Catalani and Minkler (2010) conducted a systematic review of photovoice research projects and listed the many differing study outcomes. The authors detailed how some projects used the creation of photographic images to conduct photo-elicitation with participants, but the endpoint of the research was not a health advocacy campaign or any type of personal change. Rather, project outcomes included an expanded knowledge base on participants' thoughts about a health problem. Indeed, a portion of the research projects reviewed by Catalani and Minkler (2010) was aimed at answering basic questions about participants' experiences (perhaps done as a phenomenological inquiry) to illuminate a health problem, and the research outcomes were reported as an "enhanced understanding of" (pp. 426-446) the identified issue. Although the expectation is that photovoice projects end in community advocacy, the Catalani and Minkler (2010) review article shed light on a basic quality of photo elicitation which is often overlooked in photovoice procedures.

The research convention of asking participants about images of their environment dates back to the 1950s, when John Collier (1957), a member of a multidisciplinary research team at Cornell University, was investigating the mental health of individuals living in communities dotted on Canadian shores (Harper, 2002). Collier explained how the team had turned to photo-elicitation because there was little agreement among the researchers on how psychological stress would be measured. These researchers were also testing the method of photo-elicitation by comparing interviews conducted with and without the photo-elicited conversation (Collier, 1957; Collier & Collier, 1986). Collier explained that interviews conducted with photo-elicitation were less likely to be governed by the participant's "mood" (p. 856) and offered sharper detail,

longer-lasting interviews and the possibility of releasing latent memories and reflections about that individual's life (Collier, 1957; Collier & Collier, 1986).

That initial research was summarized by Collier (1957) and published in the *American Anthropologist* and later the book *Visual Anthropology: Photography as a Research Method* by Collier and Collier (1986). These findings, reported Harper (2002), formed the basis of the nascent field of "visual anthropology." Yet, Harper surmised that the development of photo-elicitation was met with little fanfare and simply folded into routine anthropological and ethnographic work. However, photo-elicitation marked an important departure from the researcher as an authority figure, as Harper explained:

Photo elicitation demonstrated the polysemic quality of the image; it thrust images into the center of a research agenda; it demonstrated the usefulness of images ranging from fine-arts quality documentary to family snapshots. Due to its decentering of the authority of the author, photo elicitation addresses some of the postmodernism of ethnography itself. For these reasons it seems to be a particularly sociological version of visual research. (p. 15)

One major point that Harper (2002) did not address, however, was that the overwhelming majority of these photographs were being taken by the researchers during their field work, not by the study participants. Much of the ethnographic work involved presenting photos to the participant, a practice that dates back to World War II, when research was investigating the rural experiences of Italian villagers who had lost their homes to bombing (Harper, 2002). It is clear from Harper's (2002) review that a great deal, perhaps a majority, of photo-elicitation projects in the fields of sociology, ethnography, anthropology, and culture studies used existing photographs to elicit conversation, rather than having the participants create the image themselves following a question or a prompt. Thus, the legacy of this sociological and anthropological research did not build itself on inviting participants to make their own photos, which is the innovative essence of photovoice. Harper concluded his review

with this statement in his notes section: “The natural methodological connection between phenomenologically inspired researchers and photo elicitation has yet to be developed” (p. 24).

Since the publication of Harper’s (2002) insightful review, however, López et al. (2005) published an article that illuminated quality-of-life issues among African American breast cancer survivors with the poignant stance that photovoice needs further development. The researchers argue that photo-elicitation does not complete the promise or the goals of photovoice until a grounded theory approach is taken to the analysis of the dialogue that was elicited from the photographs. For López et al., photovoice projects are demarcated with the same steps described by Wang (1999), and may also employ the SHOWeD method, yet additionally need a reiterative component which was accomplished in this manner: “Our goal in blending photovoice with grounded theory was to provide the means for participants to move beyond merely reporting results to policy and decision makers to suggesting strategies and participating in developing interventions tailored to specific conditions of their social context” (p. 101).

Indeed, the suggestion of blending “photovoice” with grounded theory has had a great influence on this doctoral research and methodology. Importantly, though, we would argue that the term *photovoice* is no longer an adequate descriptor for qualitative research that blends participatory photo-creation with photo-elicitation and the grounded theory approach to analyze the raw data that eventuate from discussion. Indeed, the use of the word *photovoice* may guide many to imagine that the SHOWeD method was used, even when it was not, or other suggestive prompts were employed during the photo elicitation phase. However, as briefly mentioned earlier, the qualitative research approach for grounded theory may indeed preclude any prompts that elicit testimony that has been largely guided by agendas also aiming to elicit change talk. Indeed, the research in this project is always referred to as participatory photo-elicitation, and not *photovoice*.

Perhaps it is time to return to understanding how participatory photo-elicitation may engage a participant to offer in-depth discussion that truly portrays thoughts, ideas, and feelings through diverse types of testimony, rather than testimony that only focuses on change. Collier (1967) found in the 1950s that photo-elicitation presented opportunities that made data gathered on mental health topics such as psychological stress more sensitive; yet his subsequent work was likely insensitive to the many Indigenous communities he entered and photographed. Paging through the Collier and Collier (1986) edition of *Visual Anthropology*, one gets the distinct impression that the many Native American and Indigenous communities of the Americas were photographed, and yet sadly the photo-creation was never offered as a participatory exercise. Rather, the subjects of these photographs were oriented in way that told their story through an outsider's eyes. Perhaps the "photo interview," as Collier and Collier (1986) called it, was a more insightful process than previous techniques, but again it was carried out from the perspective of ethnography and anthropology, and not necessarily meant to benefit the community in a way that the people of the community might have wanted or supported. Perhaps this was because Collier and Collier (1986) sought mostly to describe the phenomenological findings for the ways in which people lived.

In contrast, the creation of photographs by the participants for later photo-elicitation begins as a very personal process, one that a participant typically does alone. Participants are creating what is a photographic artifact, so they are creating an image that is already imbedded with their perceptions about the subject matter. We might conclude from this review above that the photo-elicitation method offers two basic pathways: one that does not involve active participation of the subject prior to the interview and one that does. For the field of health promotion, the contemporary photovoice and participatory photo-elicitation methods would not be classified as "participatory" if the researcher were the photographer rather than the

community members. Indeed, participatory photo-elicitation with a health promotion agenda is meant to give voice to the community, and so we might conclude that the term *photovoice* is an apt name for most of this type of research.

However here we will also argue that, first, for the benefit of communities, and not the health promotion researcher, better defining participatory photo-elicitation versus the end goals of photovoice would clarify the circumstances under which research methods may be deployed and further developed for different research approaches, (e.g., grounded theory versus the phenomenological research approach). Second, we cannot have a serious discussion about developing new methods for CBPR inquiry without understanding the legacy of ethnography and damaging portrayals of Indigenous, Native, and marginalized groups by academics, which Indigenous scholars point out is just another extension of the hegemonic and colonizing society that has come to dominate the literature whilst subsuming Indigenous knowledge (Miheuah & Wilson, 2004). Third, we also need to ask what participatory photo-creation means in our contemporary era, where digital photography is an omnipresent part of everyday life through social media sharing, an activity that is increasingly prevalent among Native American youth.

Participatory Photo-Elicitation and Health Promotion in Native Communities

The research director of the Native Nations Institute, Miriam Jorgensen (2007) wrote of how the standard approach to economic development across Indian Country was largely seen as an “economic problem” (p. 11). Jorgensen explained that indigenous culture was historically (and in the recent past) perceived as part of a problem rather than a strength. “The standard approach thus misses the fundamental role culture can play as a guide to organization and action” (p. 11). Indeed, for many indigenous communities involved in rebuilding their Nation’s

health, culture—and not more research—is at the center of this work. Jorgensen wrote that culture can “guide organized action,” especially when it is done mindfully and successfully. This perspective was also shared by Airhihenbuwa (2007), who wrote of how culture may become intertwined with health provision and care in positive, outcome-altering ways. However, if culture is subsumed, ignored, or distorted in the process of research for better care provision, then the care is not care at all; it may instead be akin to malpractice.

To bring this discussion full circle with the other elements in this chapter, it is crucial to note how the indigenous perspectives of photovoice and participatory photo-elicitation have not received as much attention or review by Native communities or Indigenous scholars as CBPR (which often encompasses photovoice projects) has received in the form of book chapters and journal articles by Native and Indigenous scholars (Macauley et al., 1998; Schanche Hodge & Struthers, 2014; Tom-Orme, 2014; Welty, 2014). As mentioned earlier, Tom-Orme (2014) and Welty (2014) have written about the ethics and benefits of using CBPR for the investigation of health inequity research with Native and First Nation communities, building on writings by other indigenous and non-indigenous scholars, including Cahill (2007) and Macauley et al. (1998) who helped to establish this area of health promotion literature (Cahill, 2007; Cahill et al., 2007; Macauley et al., 1998; Tom-Orme, 2014; Welty, 2014). CBPR is a crucial part of health equity research, according to Wallerstein and Duran (2010), because it provides a means of validity testing and translational intervention by placing the investigation in the hands of the people the research serves. By the same token, non-native CBPR practitioners owe a debt to Indian Country communities that have served as the originators of promoting community knowledge, learning, and validity testing for early CBPR success.

Many CBPR principles, as outlined by Duran and Wallerstein (2010) and Parker (2018), are simultaneously Indigenous values (putting cultural knowledge and the center of

investigation), and inform CBPR ethical best practices (Parker, 2018). Wallerstein and Duran (2010) explained how health promotion researchers are often challenged by what constitutes evidence and what interventions work, and yet CBPR can meet the expectation of the processes of democratizing scientific investigation, collaborative entrepreneurship, opportunity building, and capacity enhancement (Wallerstein & Duran, 2010). Wallerstein and Duran (2010) have repeatedly challenged the historical prioritization of academic and scholastic knowledge over community knowledge. The solution offered by CBPR, as interpreted by Wallerstein and Duran (2010), is creating a space for discussing “post-colonial and hybrid knowledge,” “culturally-supported intervention,” and “local advocacy” (p. S41) for these interventions that target specific and non-as-specific health issues.

To summarize this chapter, non-Indigenous health promotors and educators coming to work in Indian country must prepare themselves to understand the wealth of community knowledge prior to investigation. The successes of the CBPR methods are not ensured because any research conducted with Native American and Indigenous communities needs to be aware of the deep context of Indigenous-led discourse about the many frameworks with which to understand traumatic experiences, including historical, multigenerational, post-colonial, and other mental health experiences. Importantly, engaging in research about mental health means not prioritizing western psychological and psychiatric perspectives above Indigenous meanings and discourses of wellness.

III – METHODS

In the first phase of the procedures outlined in this chapter, the investigator took a thorough look at the raw text data to determine if they were easily understood through brief, substantive excerpts. Second, the lead investigator found indicators in the raw data (the so-called in-vivo codes) and organized them into categories which were then housed as themes. Third, the lead investigator formed a theory out of the grounded tradition and identified all key links between the research questions and the findings in a way that was, as Thomas (2006) importantly suggested, “intuitive, transparent,” and “defensible” (p. 240), given the research questions. Finally, in using this grounded research procedure, the investigator sought to develop theory about the range of participants’ concepts, experiences, and processes of mental health and wellness that were evident as they emerged.

The Study Setting and Participants

Outdoor meeting grounds, community centers, ranch land, and sports fields located across the Fort Peck Tribes reservation lands were used as study participation sites. The reservation lands are rural and resemble a rectangle with a broad length of more than 100 miles, along which are clustered residences in small towns, namely Frazer, Wolf Point, Poplar, Ft. Kipp, and Brockton.

The Sample

The population under study for this research project were youth ages 9 to 17 years; they were pre-adolescent and adolescent children of the Fort Peck Tribes population. Twenty-three participants identified as female and 18 identified as male. No formal information was gathered

on participants' tribal affiliation or main area of residence; this was done intentionally to preserve the de-identified nature of these data gathered from this rural tribal reservation-based population where key information could potentially be used to identify individuals. The individuals in the sample shared some commonalities, which are both important and worth mentioning here. Two HP/DP staff members were co-investigators who played a key role in recruitment. Participants were likely to be enrolled in the reservation area schools of Ft. Peck Tribes or, in rare cases, attended off-reservation Native American boarding schools, but lived on or near the reservation. Although there is no formal vetting for youth who wish to participate in HP/DP activities, another commonality that the research population sample shared was that participants are eligible through their residence, heritage, or tribe enrollment to seek services from the HP/DP school-based health clinics and HP/DP extracurricular activities, social support, and provision of summer mental health care. Many, but not all, participants had been actively taking part in HP/DP services or social support activities during the summer months.

The investigator anticipated that another major commonality was that all participants in this population would self-identify as American Indian, or American Indian and mixed heritage, although there was no formal data gathering of demographic information on ethnicity to verify heritage, clan, or tribe affiliation (this tribal community has two main Native American ethnic groups). This was done intentionally to maintain the de-identified nature of the data beyond the data-collection phase. The co-investigators who helped obtain this population sample were focused on the Native American youth population, and so recruits were highly likely to self-identify not only with the Fort Peck Tribes as their community but also with one of the clans and tribal ethnic groups of this reservation community. The gender and the age of participants were gathered in field notes. Other details that may be important were noted; for example, only one participant was later identified by a guardian as "special needs" and this was noted in the field

notes and added to memorandum, although there was no systematic inquiry into the educational special-need status of the participants.

Recruitment

Forty-one minors between the ages of 9 years and 17 years were recruited to take part in this study over a 15-day period. Recruitment came in the form of an invitation during meetings and activities both before the start of HP/DP planned informal and formal activities, and formal tribe-sponsored activities that children and their parents or guardians were attending. Invitations were also extended during powwows, a weekend church gathering, through HP/DP staff on regular house visits and rounds in which HP/DP offered transportation to various activities as well as regular social worker visits. Older children who were less likely to participate in the daily HP/DP activities often agreed to participate at a designated time and obtained their parental or guardian's consent independently. Younger children and their guardians or parents were approached either at the start of or toward the end of participating in a group activity. Parents, guardians, and potential participants understood that joining this study would in no way limit their opportunity to take part in HP/DP social support activities or care provision. Theoretical sampling was carried out across three major age groups. This natural group formation became evident through field notes and was added to memoranda that noted how a saturation of themes was tied to developmental age. This became clear about mid-way through the data-gathering stage, according to memoranda taken at that time. The adding of participants continued until the investigator saw a saturation of themes in each age group—roughly ages 9 to 12 years, 13 to 15 years, and 16 to 17 years.

Informed Consent/Assent

The written consent and assent process included a thorough explanation of the study methodology of photo-elicitation and what this entailed for the participants; namely, listening to two verbal prompts, taking a photograph with an iPad, and engaging in a voice-recorded conversation about how they related the prompts to their photograph and their own concepts of mental health. In addition to the printout of the procedures, the lead investigator explained the procedures in detail prior to and during the study consent process. The consent process was comprised of parental or guardian consent and child assent, with further explanation and demonstration and whenever questions arose. During the child-assent process, extra time was taken to explain the procedures in simple language with demonstrations of iPad use and photographic image creation; moreover, the purpose of sharing and talking about a created image and the concept of mental health was explained further. In addition, the investigator explained that the creation of an image for the photo-elicitation process was a conversation tool, and participants were not required to take a photo to share their thoughts about the prompts. These explanations and the consent/assent processes typically happened in a one-on-one format to ensure that understanding was obtained and that all questions and concerns were addressed prior to study enrollment.

Data Collection Procedures

Starks and Brown Trinidad (2007) wrote that “In a phenomenological or grounded theory study, the objective of the interview is to elicit the participant’s story. Both the researcher and the participant assume that their words will be understood as spoken and intended (i.e., their words will speak for themselves)” (p. 1375). The investigator adopted this research stance to elicit narrative from the study participants.

Photo-Elicitation

Composing a photograph is a key part of a participatory photo-elicitation activity (Catalani & Minkler, 2010; Wang & Pies, 2004); here, it was used to elicit conversation with youth ages 9 to 17 years. Participants were encouraged to use the iPad to create a photographic image, following the main prompt, but the choice of whether or not to create a photograph was entirely their own. If they chose to create an image, the next procedure began when the investigator offered: "Tell me about your image and what it means to you." It was at this stage that participants could explain to the investigator how they chose to represent their concept of mental health and wellness. If they chose to address the prompt without creating an image, the conversation followed without specific reference to an image. Some participants asked to create more than one image, and this was allowed as it enabled the photo-elicitation process.

The entire duration of these activities took approximately 5 to 25 minutes per participant. This included the initial prompt-sharing moment through to image creation, photo-elicitation, and the continuation of a conversation which often included gathering lived experiences and "shadowed data" (p. 292) which Moore (2001) explains are data gathered when participants speak about other's experiences (Morse, 2001; Starks & Brown Trinidad, 2007). During the data-gathering phase, the investigator noted in field notes that youth often especially spoke of their peers' experiences. Thus, early in the data-gathering phase, if participants had not spoken about how they might help a friend, the investigator added prompts about helping peers. This typically occurred after conversation and rapport were well established as this is a valuable design aspect of the grounded theory approach (Creswell, 2002).

Prompts

Corbin and Strauss (1990) detailed how researchers may give participants additional prompts during the participatory photo-elicitation procedure to help continue the conversation,

elicit ideas, or even talk of action that addresses a particular health issue. This technique of incorporating new prompts based on the already elicited testimony of participants is encouraged by proponents of grounded research theory (Allan, 2003; Creswell, 2002; Glaser, 2017). This technique is part of the “constant comparison” (p. 451) procedure which allows for the emergence of themes that tie in with how participants were relating their own concept of mental health as well as how they might relate their own concept of mental health and wellness to observations of their peers. Participants were given the main verbal prompt, “What is mental health and wellness?” and for further clarification, “What is being healthy in one’s mind?” Often the initial prompt led many participants to ask if they could share how they conceptualized their own mental health and wellness. If their image or other things that participants mentioned during the photo-elicitation or conversation phase hinted at specific activities that lent themselves to mental health and wellness, follow-up prompts ensued such as: “Tell me more about that” or “What is it about that which helps or reminds you of mental health and wellness?”

In this research procedure, the additional prompts employed the following phrases as open-ended questions: “What does this picture tell you?” and “How did you relate this image to mental health and wellness or to staying healthy in the mind?” and “Thank you for sharing your thoughts. Is there anything else you wish to say about this picture?” Also, prior to ending the conversation, the investigator often said, “Is there anything else you wish to share about mental health and wellness or staying healthy in the mind?” This final prompt gave participants pause to summarize or add new ideas and thoughts to the conversation. Conversations were not rushed as the investigator afforded participants long pauses of reflective silence, so they could gather their thoughts. When appropriate, the investigator tried to summarize the participants’ statements so that they could confirm the ideas on their own, but also to check whether the

statements had been expressed in a cogent manner. Participants would often confirm the summation and sometimes add to it, and thus, this reiterative conversant method was useful as far as photo-elicitation or general elicitation was concerned and was in keeping with grounded theory research approach.

Audio Recording

Audio recordings of interviews were made with the explicit informed consent of parents or guardians and the assent of minors for recording the participants' voice during the photo-elicitation or interview phase (consent forms carried a separate box and place where signature was required). Participants could still participate if they did not want to be audio recorded and were informed that the investigator would, instead, take field notes on their responses (this was the case in only one instance).

Theoretical Sampling

Starks and Brown Trinidad (2007) explained how theoretical sampling in grounded theory (p. 1375) ideally means that participants are recruited with differing experiences of the process or phenomenon under study. In this study, categories emerged that most pertinently reflected the developmental age group. Through this theoretical sampling procedure, the investigator explored more than one dimension of the social processes of interest to the study, a goal recommended by scholars of grounded theory (Charmaz, 2014a; Glaser & Strauss, 1967, 2008; Starks & Brown Trinidad, 2007). Comparative procedures used at the inception of data gathering included the zig-zag method (p. 450) of data collection to ensure that a range of experiences were captured (Creswell, 2002). This led to the discovery of categories grounded in the data. Careful attention to the categories and "constant comparison" (p. 451) allowed the

lead investigator to observe a saturation of themes during the data-gathering period (Creswell, 2002).

The lead investigator visited numerous sites, guided mostly by the two co-investigators, during the several weeks of living in the Fort Peck Tribes community. The specific purpose of theoretical sampling was to draw from the geographically disperse populations across the reservation-based tribal community, and to ensure that the developmental breadth of the age range (year 9 to 17 years) was well represented. Using the grounded theory approach, and specifically theoretical sampling, also allowed the lead investigator to observe the emergence of natural groups and ensure that a saturation of themes from within those groups was represented.

The lead investigator continued to add individuals to the sample until she reached a saturation of significant themes within three age ranges (Thomas, 2006). For this research, thematic saturation came across the entire group, but there was evident variation in how the themes were presented by varying ages, which mostly adhered to developmentally important ranges of pre-adolescent, young adolescent, and mature adolescent. Thus, the lead investigator was satisfied that a range of thematic constructs did emerge in the raw data during the data-gathering phase and so proceeded with the study, allowing developmentally important groups to form the basis of analysis within and between groups in the data analysis plan, as recommended by Starks and Brown Trinidad (2007). Although at the inception of data gathering it was impossible to predict what sample size would lend itself to a saturation of themes, the investigator was confident by the end of data gathering that the 41-person sample was adequate to represent the population and sub-populations of varying ages under study, as no significantly different themes arose among the emergent categories.

Data Management and Organization

The audio recordings of interviews were uploaded to Rev.com, which is a transcription service commonly used for academic work. The Teachers College Institutional Review Board (IRB) accepted the Rev.com service agreement, which explicitly details how the service will never share the audio or transcribed audio-recorded data with any third party or individual and how it complies with privacy guidelines in keeping with the ethical use of human subject data. The audio recordings were also uploaded to a password-protected Cloud drive designated to individual students at Teachers College and managed by Google-driven environments. These audio files will be permanently deleted upon the conclusion of this research, or within 5 years' time (a standard human subjects data-holding period).

The investigator checked the transcribed conversation against the original recording, as they were gathered (usually the evening following the day gathered) and again in the post-data-gathering period, with special attention to possible transcription errors, background noise and any unclear speech, or misunderstandings (by the investigator or the subject). The transcribed text was the basis of the raw data for the qualitative analysis. Memos and field notes were added to the title page of each transcribed conversation. These documents were then converted into PDFs, and a library was created and indexed by a unique reference number for every conversation using Endnote software, which allows the library to be passcode-protected.

Data Analysis Plan

The grounded theory and procedure for analysis have been outlined by many key scholars writing on this topic (Charmaz, 2014a; Starks & Brown Trinidad, 2007; Thomas, 2006); as such, the investigator has used these procedures with grounded theory (Glaser & Strauss, 1967, 2008) to guide three main phases to the data analysis plan. The first phase involved

preparing and cleaning the raw data. Duplicates of the transcriptions were cleaned of irrelevant details (such as the transcription service logo and service agreement text). Clean copies of the transcriptions were loaded into Endnote for cataloging purposes and separately loaded into NVivo software. This phase also involved a rigorous reading of the raw data before initiating the analysis stage. Reading and reflection on field notes and memoranda that were written during and after the data-gathering period. Raw data cleaning helped create a uniformity to these notes and eliminate existing irregularities before proceeding. One such example found by the investigator was that a set of siblings entering the study insisted on participating together because, in their words, “we do everything together. Sharing this experience and insisting on participating in the photo-elicitation procedure together was also of central importance to sharing their concept of mental health and wellness. In these raw data, it was important that the transcript reflect the two different voices accurately, and the lead investigator made sure that each individual voice was represented correctly in the raw data. During the analysis stage, the investigator also noted the different voices in the audio recording and in the coding of indicators, categories, and themes.

The second phase involved the construction of categories, which is one of the methods of grounded theory research (Charmaz, 2014b; Corbin & Strauss, 1990) and was carried out both manually and with the aid of the qualitative analysis software program NVivo 7. During this phase, the investigator initiated the primary development of categories from the raw data. The first process identified many text segments related to the themes that emerged from the raw data and the features of the categories as they become apparent (Charmaz, 2014b; Thomas, 2006). The investigator developed a draft-coding frame and reiterated this process to construct the initial category scheme (Charmaz, 2014b). Following that step, the process of label creation and labeling segments of text in a summative fashion to form deeper ideas and understanding

about the categories was carried out (Charmaz, 2014b). The next steps involved the refinement of the categories, based on the decision to collapse some of the categories into fewer groups and expand by segmentation elsewhere. Special attention was paid to redundancy and overlap and the interlocking links between categories (Charmaz, 2014b; Corbin & Strauss, 2014a).

The investigator made two separate efforts to address the validity of this study. First, following Thomas's (2006) recommendations, a "stakeholder check" (p. 243) was made to validate the coded categories that emerged from the raw data because a key part of CBPR is to ensure partnership at this critical stage. This was carried out by Coy Weeks, an educator and enrolled tribal member of the Fort Peck Tribes Reservation. He has a Master's in child development, was named co-investigator on the IRB-approved research protocol.

Two student-researchers carried out the "check on the clarity of categories" (Thomas, 2006, p. 244). Taia Fagerstrom, a student from Columbia University who is close in age to the study participants, and identifies as Alaskan Native from a rural environment did the first check on categories, and coded four different samples of data. Second, Amy Small also a Columbia University student and member of Navaho Nation carried out a second check on categories in two samples. The check on categories involves giving coders a sample of the text data, which had been previously coded by the lead investigator, as well as an un-coded segment. Coders were asked to code data segments using the same coding scheme as the lead investigator. Newly coded samples were then compared. The overall agreement between raters was analyzed to see if the coding, category, and thematic scheme were valid and considered reliable (Thomas, 2006). When codes were discrepant across coders, the lead investigator and two coders met to discuss the discrepancy. Two researchers (co-investigators Coy Weeks and Kyte White Bird Orange) were also consulted about the agreement of categories (Thomas, 2006).

In the third and final phase of this research, the investigator looked to create theories by intuiting how the most important themes were related to the underlying structure of experiences of adolescent mental health and wellness. In these final steps, the researcher answered the research questions according to the findings from the theory creation.

IV – RESULTS

One very important result of the theoretical sampling was that theoretically significant differences emerged in the raw data early on and led the investigator to the analytic decision of focusing key themes that are related in part to child development. Children of different ages exhibit varying sophistication in their speech, ability to explain their mind, and willingness to share their thoughts. As mentioned in the previous chapter, the “zig-zag method” (p. 450), suggested by Creswell (2002), was used to sample three main age ranges. Upon further analysis, the basic groups were reflective of their developmental age, with some minor adjustments explained in the next section. This opened the door to early theory development. However, it was during the in-vivo coding of the analysis phase when indicators led to category formation, then to sub-themes that guided both major theme development, and theory creation within and across the important subgroups.

Corbin and Strauss (2014b) have written extensively of the “fortuitous” emergence of “theoretically significant events” (p. 144) during the data-gathering periods:

A researcher often happens upon theoretically significant events quite unexpectedly during field observing, interviewing, or document reading. It is important to recognize the analytic importance of such an event or incident and to pick up on it. When an analyst happens upon something new or different, he or she must stop and ask: What is this? What can it mean? (p. 144)

Perhaps there was no single event that the lead investigator may point to, but rather the timing with which the data were gathered that gave children the agency to consider the prompt in their own settings, on their own time, and in situations that were not pressured by scholastic or extracurricular demands. Perhaps it was fortuitous that the data were gathered in the summertime, when children in this community are mostly free to congregate in community school yards and ball fields. This was also a time of year with the longest days, when children are

left to play by themselves, and willingly become makers of their own domains. For the younger children in this sample, the neighborhood common areas are a landscape for play, imagination, and socialization. Indeed, meeting them in these play areas also meant entering into their worlds. Some may criticize the assumption that summertime is a time for children to both create and live in their own domains. Imaginative play surely takes place year-round, even in the more scheduled school months of September through May, when the frigid temperatures and incessant wind of the Northeastern plains drive children indoors. Indeed, we are not debating this reality, but instead we are making the point that summertime provides a window during which play and social network formation are easily observed and taken for their full contribution to the worlds, which children inhabit both by chance and by their own design.

When it came to major theory creation, it was easy to see how overlaps in very specific areas were theoretically important as they tracked closely not only with the development of the child but, importantly, with experiences common to this population of plains tribe youth. Thus, what are the commonalities as well as the areas that distinguish the youth's concepts of mental health in this sample? More importantly, how do they inform the major themes? The next sections, which discuss the results for each of the project's specific aims, demonstrate the grounded theory process of finding elements that informed the early categories, validated them further, and observed them for major themes and potential links to the way the major themes contributed to theory formation.

Results for Specific Aims

The first specific aim was met by using grounded theory to analyze the data gathered during and after the photo-elicitation phase from the 41 participants and resulting interviews. The first aim also allowed the lead investigator to "discover" appropriate coding conventions

grounded in the words, phrases, and narratives from the raw data of the children's interviews.

The first specific aim also called for a side-by-side look at the following three adjacent age groups: 9 to 11 years, 12 to 14 years, and 15 to 17 years.

The main finding from the analysis was that all the categories within a discovered major theme trended together for each age group, with some overlap between 11-year-olds and adjacent 12- and 13-year-olds. This overlap occurred in theoretically important areas, however, and it informed the theories that were built on the major themes. Categories were housed within a major theme because they emerged by bringing theoretically significant meanings to these themes. These were retested using the "constant comparison" approach (Creswell, 2002, p. 451); for example, labeled in-vivo testimony, which was summarized as indicators and then categorized into themes, was compared with testimony elsewhere for wording, meaning, and context. Through the work of organizing the categories and housing them into major themes, the lead investigator could generate a theory of how youth identify their own concept of mental health. Five major themes emerged across the sample of children and helped explain the children's concept of mental health and wellness in this sample. They were: **strategies for mental health, ecologies and mental health, identity and mental health, social support/loss of social support and mental health, and ambivalence to mental health**. These major themes and the categories that informed them are displayed with detailed categories and indicators in separate matrices in Tables 1 through 6.

The main finding from this specific aim was that all major themes were seen in each of the age groups, which means they were valid for the entire sample and to a diversity of categories housed in each major theme informed by indicators echoing the in-vivo testimony from the three age groups. A second finding was that a majority of pre-adolescent children in

Table 1 Major Theme: Strategies for Mental Health and Wellness

When children address mental health they sometimes talk specifically about the types of things that make them happy, improves their mood, helps others, or is a specific method of coping with unhappy thoughts through personal expression, acting out, showing distress, self-medicating, anxiety or pain.

Category 1: All activities as strategy

Group informal activity

Humor, laughing, smiling, playing (with kids or pets)

Active activities with group component

Organized (Basketball, football, track, traditional dance)

Sports played without an organizing structure (basketball,

football, baseball, frisbee, softball, lacrosse)

Hunting (with an adult supervision and gear)

Play that is rule-oriented and rigorous (virus, ditch, tag, games on bikes, racing)

Play that is not rule oriented, but often rigorous (cruising the neighborhood on bikes, climbing trees, splashing, swimming, chasing, swinging on a swing)

Group therapy activities

attending class with a provider, equine skills, therapy dog

Solitary active activities

Climbing a tree

Going for a run or for a walk

Solitary activity (reflecting)

Thinking, remembering, reminiscing, ruminating

Activities of self-expression

Journaling

Art creation, drawing, painting, sketching, making designs, art, crafts.

Writing stories, poetry, letters, lyrics

Reviewing one's journals, past drawings, writings, journal entries

Creative face painting*, participating in drama*, acting*, play-writing*

Survival activities

Making amends with others

Doing favors for others

Clandestine hunting for food (with BB gun)

Asking/giving others food/money

Category 2: Space creation as strategy

Non- solitary

Distracting oneself with humor

Ignoring others with an ally

Distracting oneself with play, friends, movie, TV, talking

Asking guardian for permission to live somewhere else.

Leaving home and staying with a friend.

Leaving community for a place perceived as more supportive, or having more resources.

Sharing feelings, emotions, problems with close ally.

Initiated by oneself, or others

Benchmarking one's own feelings, emotions shared/alone

Seeking professional, community-based help/counseling

Solitary

Distracting by reading, drawing, sketching

Ignoring others by oneself, walking away from others

Hiding from view

Staring at the sky, landscape, clouds, trees, grass, flowers, a picture, photograph, for calming affects.

Appreciating the beauty of sky, landscape, trees, clouds, grass, flower, pictures for their calming affects.

Playing electronic games, playing with a device

Watching TV, movie alone, on social media (specifically to change one's mood)

Category 3: Expressions of frustration, distress, pain, heartache

Minor transgressions

Laughing at a teacher

Teasing, name calling

Disrupting classroom/ Distracting others

Breaking a pencil

Tearing up a book

Serious transgressions

Drinking alcohol (for purpose of treating pain)

Doing drugs (for purpose of distraction)

Striking others, physical fighting

Initiating fights

Graffiti*, defacing property, arson*

Category 4: Life path creation as a strategy

Assessing one's potential life path, trajectory, choices, goals

Testifying to other's expectations as basis for one's potential

personal goals, decisions, and mental health

Testifying to keeping oneself stable, steady, on course

Assessing community's trajectory

Testifying to stability of youth community is key to

mental health overall

**testimony of graffiti, arson from key informants, not participants*

Table 2 Major Theme: Ecologies and Mental Health

When children talk about being healthy in the mind they often paint a picture of their world. These are the worlds the child inhabits. Children often volunteer information about their world unprompted. They can inhabit a positive world, or and less positive, more adverse one. In rare cases they might inhabit two very different worlds.

Category 1: Positive ecology

Positive ecology with group component

Child creates a dioramic description of their world.

Example: child describes the areas frequented, the social network, the specific games played in this place with this network and the use of bicycles to facilitate this play, and boundaries set by parents and guardians.

Example: Testimony of enjoyment of formal and informal elements to participation in sports for example the travel to tournaments, making new friends, having an expanding social network through teammates

Testimony shows the enjoyment of activity but also the importance of the activity to the child, the child reports a purpose that extends beyond the child's happiness to others.

Example: Hunting (with an adult) for helping others get food.

Category 2: Adversity ecology

Difficulty in one's home

Mention of several factors, people, and threats in immediate vicinity,

Not feeling safe at home, (in past or present). Noting persistent threats to others, between others in or around home. Concerns or nerves about personal safety narrative

Staying in one's room, confining oneself to one's room

Category 3: Neutral ecology

Reporting on one's surroundings, but not offering detail. Not connecting the surroundings, or friends in the surrounding to mental health.

Creating one's own positive ecology

Combining personal rituals with other elements such as listening to music, and a meditative element such as gazing at the sky or stars, evoking memories or a feeling of a lost one.

Evoking practices that are both personalized and ritualistic and may involve another person, but are carried out in a specific way, under specific traditions, places or times. Example: Traveling and competing on a pow-wow circuit.

An imagined future ecology

Seeing oneself as a high school graduate with supporters attending one's graduation.

Seeing oneself in a place with support and resources from family for alcohol treatment.

Seeing oneself as employed, owning a car, having stable housing.

In wider community

Distrust, teasing, struggling with teachers, professionals, peers in a specific situation, circumstances, location or activity such as a school

Noting how many peers may be suicidal

Noting how many peers are using drugs

Speaking generally about youth and threats to youth

Explanation of a place or situation with both positive and adverse elements to it. Example: Being fond of school and learning, but not of peers, and taunting.

Table 3 Major Theme: Identity and Mental Health

When talking about mental health and wellness, children sometimes include elements about their own identity or identity formation.

Category 1: General identity

Testimony about general identity, explain where one grew up, identifying oneself with a place. Testifying to be part of a place.

Testimony or discussion of Native American traditions, ways and themes, often given or told using the “we” pronoun.

Identifying as being part of a family, friends, siblings, cousins, grandchildren

Category 2: Specific identity

Difficulty

Testimony to not knowing oneself or one’s mind.
 Having internal confusion or conflict.
 Specific concern that one cannot be effective, decisive, intentional.
 Believing one’s effect on others is negative, annoying, burdensome.
 Having (emotional) pain, having trauma, identifying one’s emotional upheaval as “my pain”
 Knowing one’s tendency to isolate oneself, hold in feelings, not share troubles.

Ease

Competency, self-efficacy at sport, activity, achievement
 Competency, self-efficacy at solving one’s problems
 Competency, self-efficacy at helping others in specific ways
 Realizing one’s own digressions, associating oneself with digressions, internal struggles

Category 3: Identify construction, development

Testimony that one is becoming something. Identifying oneself as part of something, concept or culture.
 Presenting an image of oneself in the future.

Identifying oneself as an integral part of something. This can be one or more ethnicities, one’s community, nation, tribe, school, neighborhood, or a social network, program of suicide prevention, or health program

Imagining oneself in the future, imaging oneself doing specific activities related to one’s identity in the future.

Identifying with the landscape or elements in the natural environment.
 Identifying oneself with a set of ideas, a set of ideals

Table 4 Major Theme: Social Support and Loss of Social Support and Mental Health

Testimony from the child of people identified as providing some to a lot of support in their life, but this can also be a report of a lost inter-personal relationship

Category 1: General social networks

Testimony about general networks of friends, siblings, cousins, relatives.

Testimony or discussion of a social network of friends seen almost every day (generally involves evoking the “we” pronoun, and testimony of specific reciprocal exchanges).

Testimony of one’s family, family members

Category 2: Specific interpersonal relationship(s)

More than one relationship

Testifying to many specific interpersonal relationships with reciprocal exchange

One relationship

Testifying to a specific interpersonal relationship that is reliable, reciprocal exchange

Category 3: Reports of broken, lost or inactive interpersonal relationships

Child reports loss of inter-personal relationship due to person’s death.

Loss of relationship due to the person being caught up in their own struggles, chronic disease

Child reports loss of inter-personal relationship because of the person’s incarceration.

Loss of relationship due to distance, rurality, relocation

Category 4: Potential social support

Reports relatives, and family are elsewhere, but could potentially be supportive, helpful caring, and non-judgmental if one were to be reunited with them.

Table 5 Major Theme: Ambivalent Thoughts/Feelings about Mental Health

When children testify on the topic of mental health and wellness, or staying healthy in the mind, they often say something with uncertainty in their voice, contradict themselves, or change their mind about how they wish to share. Sometimes they are aware of their ambivalence and want to continue to talk despite this, others time children are more frustrated, and choose instead to end the conversation.

Narrative that one is indecisive, and has trouble finding a way to express themselves, and this is of personal concern to them, because they wish to be less ambivalent.

Testimony that one can’t express oneself, but child does not stop dialogue, instead searches for ways to express themselves.

Child testifies that they are unsure, and does not want to think about it, or talk any further.

Narrative that one can’t express oneself.

Child feels what they have said is obvious, needing no further explanation*

* Suggested by coding checker Taia Fagerstrom

the first grouping of children ages 9 to 11 years testified to how being happy and improving one's mood are key to their mental health and wellness concept.

However, beginning with the next adjacent age group of 12- to 14-year-old children, happiness has far fewer mentions. Furthermore, children would photograph something they liked but not tie it directly to their concept of mental health and wellness, perhaps signaling difficulties in expression or feelings that some things needed no further explanation. In the oldest adolescent group of children, the concept of only happiness as mental health is not found. It seems that it has been replaced by a narrative in which stability describes mental health for the majority (seven of nine participants) of the mature. A discussion of these findings will be made in Chapter V.

Again, using grounded theory, the second specific aim was to compare three adjacent age ranges for the ways in which children might associate their own mental health and wellness narratives to specific activities, social support, cultural identity, rituals, traditions, strategies, or formal mental health care to maintain mental health and wellness. Investigation into whether these activities or strategies were identified as intrinsically positive or negative was a goal of this specific research aim.

2. The main findings from the second specific aim are based on the formation of major themes. The **strategies for mental health** was one of the most visited themes that fed children's concept of mental health and wellness. This theme houses many categories of activities as a strategy for mental health, with several subcategories. Activities mentioned in the data are diverse and include activities that were spontaneous (such as laughing with friends), and more formal activities such as participating on a sports team. The space creation category captures the ways in which children reported that they purposefully disengaged with a problem or mental health threat. For example, children may distract themselves from stressful situations by

ignoring taunts, or they may physically hide from real or perceived threats. The expression of frustration category captures how children knowingly explained how they showed distress to others. It also included how children noted the distress of others and others' actions that followed. Children actions and their observations of actions included things like destroying a book or breaking a pencil. More serious behaviors such as hitting a peer, destroying property, or numbing one's (mental health) pain by drinking alcohol or distracting oneself from traumatic thoughts by using drugs are also noted in this category.

Most of the instances of identifying something that was deemed intrinsically bad through testimony came from older adolescents. For example, the word and concept of *substances* came up with older adolescent children. This in one instance was qualified by the word *bad* by an adolescent who testified to knowing many people who cope by using drugs: "They turn to bad, bad, bad substances to help them cope with their pain." But another adolescent who testified to having used "drugs" and alcohol recently did not identify either as intrinsically bad, but spoke later about getting help to not use alcohol anymore. One adolescent who purportedly damaged property testified to having done "all sorts of bad stuff that was kinda my fault." Another child testified to hitting a peer as making "mistakes" that were "bad." Other instances, such as tearing pages from a book or purposefully breaking a pencil, were identified as acts showing anger and frustration at someone, or something.

When children talked about being healthy in their mind, they often evoked a dioramic view of the worlds which they inhabit. The **ecologies and mental health** major theme captures these worlds through categories that form when children volunteered many or just a few telling details. They may inhabit a positive ecology, a neutral ecology, or an adverse one. In some cases, children might inhabit two very different ecologies, such as an adverse home environment, and separately, a thriving, supportive, social network of young friends that meets in neighborhood

play areas or on sports teams. Care must be taken with this theme because context is key to understanding that the children are communicating a narrative about the world they inhabit, and not just giving a list of activities and scenery from that world. A major finding here was that the young children who named many strategies for mental health and wellness also reported inhabiting an ecology that was positive, according to their enthusiastic testimony. Occasionally, pre-adolescents and young adolescents reported that they endure struggles centering on a difficult situation at home or at school. Some reported difficulties with their apparent strategies as failing. This finding may offer theoretical evidence for how positive ecologies in younger children and older children overlap, a point to which we return in Chapter V.

Another major theme—**identity and mental health**—captures how children oftentimes incorporated elements about their own identity or identity formation into their concept of mental health. For example, sometimes children emphasized activities in which they had skill and high self-efficacy. Children sometimes identified strongly with a place, a group, or an ideal that was related to their concept of mental health, for example a school, a sports team, a family. Aspects of their identities can be emergent, based on current realities or expectations grounded in their present or past. Some children projected their ideal identity based on their aspirations. One other finding was that across this youth sample, a handful of children linked their Native American identity to their mental health or the mental health of their peers and the wellness of wider community. This testimony was sometimes covert, however, and elicitation about Native identity was sometimes not as forthcoming. Despite this, several children incorporated depictions of traditional Native life and traditional Native habitats such as teepees, crafts,

symbols, or artefacts into their created photographic images prior to the photo-elicitation phase. Again, this finding is theoretically important and will be discussed in the Chapter V.

A fourth major theme was **social support and loss of social support**, which included testimony from the children about interpersonal relationships. The categories in this theme are informed by how children related testimony about interpersonal relationships that were associated with a lot of support, or a little support, or the loss of support to their mental health. However, this major theme has a dichotomous nature to it, as interpersonal relationships were mentioned especially if there had been recently lost. Special care must be given to this major theme as the categories, although seemingly similar when summarized, are built from indicators that can seem very different from one another. The major finding here was that nearly all older adolescents spoke of either a loss of an important interpersonal relationship in connection with their mental health, or emotional pain that was inadequately understood by the person in his or her most significant interpersonal guardian or parent relationship.

Perhaps the most intriguing finding involved the final major theme of **ambivalent thoughts/feelings about mental health and wellness**. The youngest children in the sample, ages 9 and 10, were very confident about their concept of mental health and wellness. When children ages 11 and older testified on the topic of mental health and wellness, or *staying healthy in the mind*, they were often much less confident. Children around the age of 11 began to exhibit ambivalence. For example, they might start to say something and then stop themselves mid-sentence. They had uncertainty in their voice, and often changed their mind about what they wanted to share. Some children were aware of their ambivalent thoughts or feelings, and aware of their difficulty in expressing themselves. Children sometimes said they were very unsure about their concept of mental health and wellness, but were eager to talk at length. However, others testified that they were too frustrated by their ambiguous or mixed feelings and

thoughts, and they ended the conversation. One older adolescent, over the course of the elicitation process, also voiced frustrations about their sense of not knowing how to express themselves, and having ambiguous feelings about their concept of mental health recounting how this was a personal trait that they both recognized and distained. However, eight of the nine older adolescents interviewed persevered to give answers, and half of that group gave detailed answers about their concept of mental health.

3. Finally, using a grounded theory approach, this research aimed to best understand how participants approached the photo-elicitation method to represent their concept of mental health and wellness. As part of this aim, the investigator questioned how frequently youth used metaphor, analogy, shadowed data, and their own recounted lived experiences. This research aim was undertaken partly to understand children's reactions to the photo-elicitation process, especially when they were asked to photograph something that is not physically tangible.

The finding for this third and final specific aim was that the testimony from children in this sample fell into five main categories and several subcategories clarifying details about the types of testimony (see Table 6 for details and examples of testimony). Of the 41 interviews, there were only three mentions of literal explanations of mental health and staying healthy in the mind. Personal narratives about strategies or positive ecologies for mental health and staying healthy in the mind, as well as shadowed data encompassed specific observations about staying healthy in the mind, as well as generalized observations about peers.

Finally, a handful of older adolescent children employed analogy and metaphor to express their mental health concepts, strategies, and ecologies in words. One adolescent created a landscape picture during the photo-elicitation period and, with a finger, traced the relief of the landscape, explaining how the landscape's oscillations were their mental health ups and downs. In this metaphor, mental health was the level land. The peaks and valleys of the

landscape (perhaps, the experienced exuberance and depression) were the loss of mental health and wellness. Images of objects or depiction associated with traditional, or pre-colonial Native life may have taken on properties of analogy for many participants, however, these somewhat covert analogies were not always voiced, and so were not realized through the raw data. As discussed in chapter 1 the parameters of this research excluded the analyses of the created images alone. The possible use of analogy and metaphor in images, without spoken suggestion is discussed in detail in Chapter V.

To summarize, this chapter demonstrated through the findings how five themes were discovered from categories that trended together because of indicators that arose from in-vivo indicators of the raw data. Whilst the five major themes hold across all age groups from the sample, each individual's concept of mental health may touch on all major themes or, in rare cases, only one single category within a major theme. To grasp at some of the theoretically important findings, the next chapter offers a discussion that moves this research forward so that its potential impact may be assessed and further questions may be asked.

Table 6 Types of Testimony

When children express their concept of mental health they may take a literal stance, a narrative stance of their own or others' experience. In some rare cases children in this sample employ analogy, or a metaphor to illuminate their concept of mental health.

Category 1: Literal explanation of mental health and staying healthy in the mind

Staying healthy in the mind is literally keeping your brain from disease, as this child testifies:

"When you do like smoking you do like brain cancer and tumors and stuff like that. And then it'll get you hooked up on whatever it's called. They'll get you hooked up on an oxygen. And if you don't do oxygen that good, you'll get cancer."

Mental health and staying healthy in the mind is maintaining head and brain health:

"Don't shake your head up that much."

This testimony is a mixture that involves a literal translation and the sense that mental health is associated with one's happiness:

"This picture makes me happy because the trees make me happy, because whenever I am feeling sad, they help me remind me that if they weren't here, then I don't think I'd be breathing that well and I think I'd be very sick."

Category 2: Personal narratives about mental health

Short narrative about maintaining mental health:

"I stay happy is when people don't get on my mood. Or like on my bed."

Detailed explanation of how this personal strategy helps oneself create inner space:

"If there's a picture and you can imagine yourself being in it, in a beautiful place. It calms nerves, just looking at a picture and thinking of where it is, and how beautiful it is."

Testimony of enjoyment of formal and informal elements to participation in sports:

"The tournaments and how we ... I went to plenty when I went to school. We had to go places. Instead of stay here [sic]. I made new friends in softball. I made friends last year and this year."

Testimony shows the enjoyment of activity leads to fun-making as a strategy for mental health:

"Climbing them ... and making things. You climb them and then you climb high, hold on, hold this branch. Up here, because I can see the sky more. It's fun being in trees, somehow."

Category 3: Shadowed data; testimony of other's strategies or situations

Specific observations of others:

"Well my sister just sits inside and watches TV. Yeah, or she'd go in her room and take a nap. She wouldn't get mad or angry or anything. She'd just sit in her room and be on her phone."

"they mess around to be mad. Like, they'll goof off in class, or make a bad decision to do, like yell at a teacher or ... do bad stuff in school."

Generalizing from numerous observations:

"if you don't talk about your problems with people and you just turn to bad, bad, bad things, it can just make the problem worse that's going on in your head"

"Other people I know play ball...they stay active. They try not to go to, basically, the dark side."

"They think of suicide or drugs, or alcohol...they probably see their parents do it, if they know what it does."

"being healthy is getting away from people that have negative effects on you"

Category 4: Analogy and Metaphor**Noting beauty of colors, sky, clouds as an analogy for staying mentally well and healthy.**

"It... [emotions] to me, in my mind, if I think of something like this, I think of it as a dark color. If something's full of life, it has to be one, a bright color, but then there's multiple colors."

Making a convert analogy to mental health: "it's kind of keeping our tradition... I think it'll be pretty important within the next few decades with the younger generation."

This adolescent points to their image as a metaphor.

"So, mental health to me, it would be like, it would be level, you would go up, you go down, you level out back again. You know, you can just drop, you can go really high, or you go really low."

Validation

Three separate efforts were made to address the validity of this study. First, following Thomas's (2006) recommendations, a "stakeholder check" (p. 243) and a "check on the clarity of categories" (p. 244) were made to validate the coded areas that emerged from the raw data, as these areas formed categories that captured the experiences of the young participants. The checks on the "clarity of categories" were carried out by co-investigators Coy Weeks and Kyte White Bird Orange. Then, two types of checks were carried out by Alaskan Native Taia Fagerstrom, who is a student at Columbia University. Ms. Fagerstrom first read through excerpts of raw data and, separately, the guide to coding the raw data. She then coded a sample of raw data. Secondly, using a slightly different method she was given a coded section of data (which had been coded by the lead investigator), and then asked to code two separate samples. This resulted in an almost exact match to the coding on 18 of the 20 coded areas. Similarly, Amy Small, also a student of Columbia University and member of the Navajo Nation, coded segments of raw data in two adjacent age groups. Ms. Small's coding offered a match of 7 out of 8 coded segments in one sample. One of the discrepancies came for areas that she labeled "identity", but upon further discussion Ms. Small's reason for labeling many segments as "identity" seemed to be influenced by the appearance of the pronoun "I" in the raw data. This was discussed with Ms. Small, and a subsequent effort to code data resulted in perfect matches.

The lead investigator discussed the discrepancies both separately and together with Ms. Fagerstrom, and Ms. Small, after which both parties came to a strong consensus on appropriate coding for the two discrepant categories which matched the lead investigators. This process was repeated twice for samples from the younger age groups. In both of those cases, minor

discrepancies were resolved through discussion, followed by consensus. One category housed under a major theme was added to accommodate Ms. Fagerstrom's thinking about the children's ambivalent thoughts and feelings. Ms. Fagerstrom felt that because she has siblings close in age to the pre-adolescent participants' in the study, she sensed that sometimes this age group's so-called ambivalence may, in part, be due to these children believing that some things they state briefly are obvious and need no further explanation. Thus, the lead investigator's perception of ambivalent thoughts and feelings has been broadened to include the possibility that children believe some statements *need no further explanation*.

Second, Coy Weeks, who is an educator and an enrolled tribal member of the Fort Peck Tribes Reservation, considered the categories fitting to the coded raw data. Mr. Weeks has a Master's in child development and was a named co-investigator on the IRB-approved research protocol. Categories were also discussed with Dr. Kayt White Bird Orange, who was the third co-investigator and embedded in the community as a program clinical psychologist. She too felt that the coded areas appropriately reflected the categories.

V – DISCUSSION

This chapter offers a summary of the research and key findings, with attention to the formation of theories and their application in future research and practice. Developmental psychologist Urie Bronfenbrenner (1986) warned scientists that those paying attention to child development studies should not rely solely on actual age but be aware of life events that signal developmental changes. This idea is captured in the “chronosystem,” in Bronfenbrenner’s (1977, 1986a, 2004) Ecological Systems Theory, which was visualized earlier in Figure 2. Indeed, in this sample, children not only seemed to gather in natural age groups, but life experiences also seemed to determine some differences between the groups. By the time the children reached their mature adolescent years, many had experienced at least one or more adverse events, such as a loss, traumatic experience, or a mental health crisis. Thus, this is something to keep in mind when reviewing the key findings, especially as this research aimed to uncover the strengths of children as they relate their concepts of mental health.

Summary of Research and Key Findings

An appropriate visualization of the major themes identified in this project may illustrate how they connect with one another and with many expressions of mental health. Figure 5 is a visualization that illustrates how each child’s concept of mental health is represented by a Rubik’s Cube. One side of the cube represents one theme, for example, strategies for mental health. In Figure 5, each square on the cube’s side hold a specific strategy for mental health. A different side of the cube represents a different major theme. For example, another side would be “identity” (see Figure 6), as it relates to mental health. There too, each square represents a unique aspect of that child’s identity, such as high self-efficacy at creative tasks, a feeling that

being “indecisive” is the cause of one’s self-described disfunction, for example. Another side of the cube may show the various ecologies that the child experiences: their home environment, their world of outdoor play with friends, or their school environment are some possibilities.

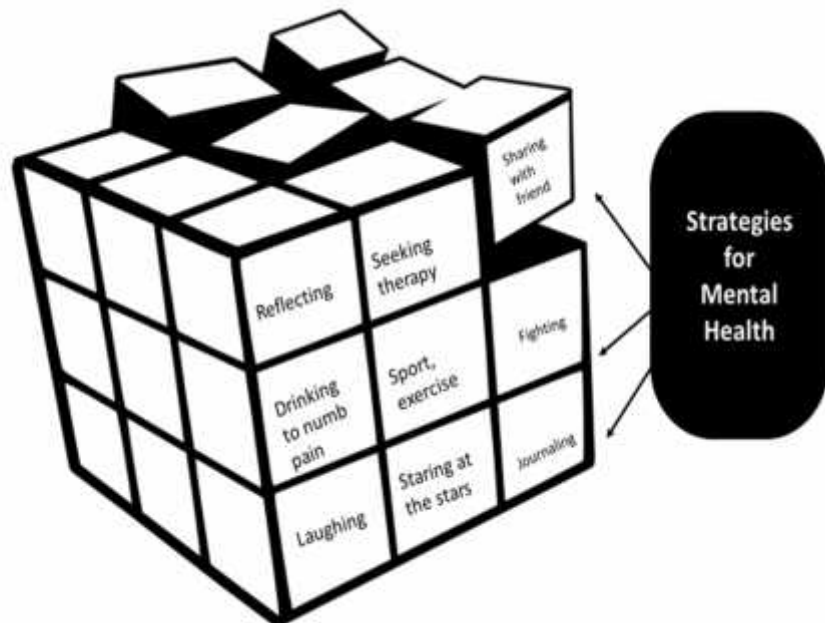


Figure 5. Major themes on a Rubik’s cube
Each side has indicators that are unique to each child, but trend together to form categories which are housed in major themes (free artwork of “cube” courtesy of clker.com)

The key to this visualization is that, given the six sides and the variety of personal strategies, identities, ecologies, and presence (or absence) of social support possible, the potential combinations of all these squares are numerous. For example, to extend the analogy further, a standard Rubik’s Cube has over 43 quintillion potential combinations; no doubt a single child’s mental health through the lens of the major themes uncovered here is even more complex. A second point made with this visualization is that not every strategy, ecology,

identity, and social support is available to every child, and the child’s development means that all the potentially helpful aspects of these themes emerge and fade, as do potential mental health threats. An emergent indicator is illustrated in Figure 6, where one aspect of identity and mental health is symbolized with a question mark.

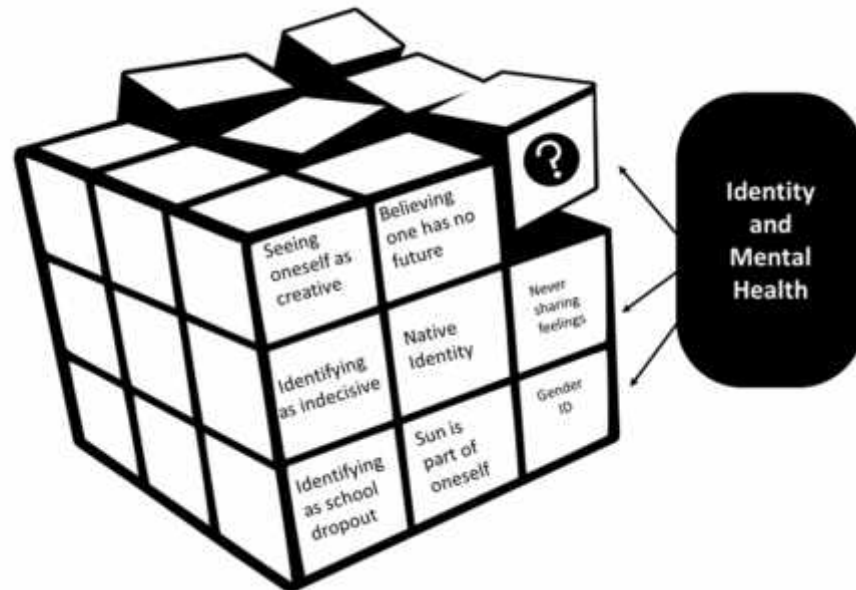


Figure 6. Indicators emerge and fade over time (free artwork of “cube” courtesy of clker.com)

Just as a Rubik’s Cube has moving parts, so does a child’s concept of mental health. For example, a child might maintain their mental health through strategies related to sport and exercise. The child might even identify basketball as an activity that makes them happy or improves their mood. But another child might mention basketball in a totally different context of team participation. This child may go on to explain how they enjoy every part of “basketball” because they make new and lasting friendships with teammates, they also enjoy traveling to tournaments, and feel excitement when they play in a game. The child has gone beyond

describing a strategic activity for mental health and has given us a diatomic view of their positive ecology of team participation. These examples show how the major themes—the strategies and ecologies of mental health—do overlap in places. Perhaps a more apt way of describing this is to say that ecologies, strategies, and identities are interlocking features similar to the squares of a Rubik’s cube, when the squares inter-mingle with different sides. The context is key here, as interlocking themes are theoretically important when one theme informs or influences another theme. For example, some children testify they are aware that their positive ecology offers strategies for mental health, yet other children do not seem to make any such connection.

Children’s Strengths as “Active Ingredients”

Many young children in the sample spoke about the benefits of humor and humorous friends: “Everybody is happy when they laugh!” exclaimed one child. This same child testified about a cousin in a photograph: “He’s somebody who makes me feel happy!” One child explained that a friend was good for their mental health because “he’s funny, and that,” and another young child explained that friends were important because “we share laughter.” On maintaining mental health, the siblings offered, “We’re both happy and we like to smile a lot.” These same siblings also explained how they might cheer each other’s mood: “We are silly. We make each other laugh. But, then we are happy again.” All the children who said these things were ages 9 and 10 years.

Indeed, sharing humor, fun-making and laughter, and even simply smiling are spontaneous shared activities that were highly regarded among the youngest children in the sample. Sharing laughter and social interaction for bringing on a happy mood (if only for a short while) trended together and were often uttered in the same breath. But these were the

simplest, most common strategies that the youngest children in this sample employed. The young children talked of many other ways to maintain mental health, including sharing their favorite activities, or seeking out specific interpersonal relationships as anchors for fun-making and support. Indeed, the youngest group of children told us that they associated mental health with maintaining a “happy mood” and “friends,” even if their actual mental health was far more complex than they portrayed.

Research has shown that most children above the age of 1 as well as adults do a fair bit of imagining (Harris, 2000). This is a phenomenon which developmental psychologists have tackled with energetic reverence. Imagination is tied to many revelatory processes. It is noted in preverbal children who may imagine where a moved object has turned up by hearing testimony from an adult (Harris, 2000). Children also use imagination for deciding if someone is trustworthy, for sifting through facts, and for finding solutions (Harris, 2000). We know that when the young children in this sample addressed mental health, they often first testified to the types of things that made them happy. Perhaps the children were using their imagination to picture how a healthy mind is a mind belonging to someone with a smile on their face reflecting happiness. It is not, as it might seem, that the young children expected mentally healthy people to walk around with a permanent grin and be perpetually happy. Perhaps the children were accessing their memories of their positive ecologies, and these memories tended to skew towards happy, fun-filled times. However, in one example, a child saw that a teasing peer became an affront to the well-being of a friend. This testimony offers a window into a young child’s strategies for dealing with an unpleasant situation.

My friend was talking and then this boy named Bob [named changed], he called her Big Teeth and then she started crying, and I helped her stop, and then we told the teacher, and then the teacher had to give him the punishment, and we didn't try to be mean to him back or anything.

In this testimony, we hear the child refer to several strategies for maintaining a positive outcome, such as calming a friend, seeking the aid from a teacher, and avoiding peer-to-peer retribution. This same child testified to experiencing a positive ecology of friends and play. To summarize, the theory that emerges here is that young children identify happiness and all its expressions (laughter, smiling) first and foremost as the active ingredient of mental health. However, pleasure, friends, justice, and safety are also recognized by young children as active ingredients for a positive ecology that contributes to mental health. Whilst the description of ecologies, both good and bad, continues through all the age groups in this sample, the portrayal of happiness as an active ingredient for mental health almost vanishes in the slightly older group from the sample.

Age and Mental Health Concepts

In response to *what is mental health and how do you stay healthy in the mind*, young adolescents (aged 12 through 15) were far less willing to talk about things that make them happy. The use of the word *happy* has not vanished entirely from this group's word usage. For example, one 12-year-old said, "I stay happy is when [sic] people don't get on my mood," whilst another 12-year-old testified that they like taking in the natural landscape because of its mood-enhancing qualities that influences mood: "I guess getting [sic] kind of happy."

Mostly, however, we saw testimony moving away from talking about happiness. A 13-year-old child offered, "I get nervous . . . and I stay outside for the longest time, it's like a soothing thing." A third 12-year-old said that they feel "a little bit calm" after staying outside. Some of these subtle changes were also seen with children in the first age group. For example, 11-year-olds seemed to be similar to their younger counterparts in that they named fun making, play, and laughter as active ingredients for mental health and wellness. However, like their older peers, they also exhibited hesitation and ambivalent thoughts and feelings, which were most

pronounced in children ages 12 and 13 years. Unlike their younger counterparts, children of 11 and 12 were oftentimes unsure of their concept of mental health, but also realized mental health had something to do with their interactions with other people, and the possibilities of being made nervous, annoyed, or angry by others. This is the age when children begin to refer to calming oneself, one's ability to self-soothe and ignore threats and taunts, or physically remove oneself from the presence of others, as strategies for mental health. Seeking happiness gets less mention.

One of the most visited strategies with which children mentioned how they calm themselves was by *making space*. This is a category of strategies that reflects quite disparate actions, but all to the same effect (see Chapter IV, Table 1, Category 2). For example, in this category, many children talked about taking in the sky and natural surroundings to soothe, distract, or clear their mind of unwanted thoughts. There were 13 unique mentions of the sky in this sample and many more covert references. Separately looking at trees and taking in the landscape also received a dozen more unique mentions and as well as references across the entire sample. Context is key here. Appreciation of the sky for young children is linked to clear weather and the possibilities of outdoor play. Beginning with the middle group (ages 12-14 years), but continuing with older adolescent children, the sky and the natural landscape takes on many more meanings linked to mental health ecologies, strategies, loss, and even identity.

One teenager spoke of conjuring the presence of a departed cousin by staring at stars on clear nights: "I feel like she's there with me." Another teenager, a recent orphan, regarded the sun and the clouds as companions that accompanied them everywhere: "When I look at the sky, I call the clouds, my clouds! And I call the sun, my sun!" Perhaps these two adolescent children linked their mental health to the sky not only as a strategy for mental health, but also as a link to those who have been lost. This testimony then was also about loss of social support

and mental health following the departure of a loved one. In other words, the interconnecting parts here are of theoretical importance because strategies were forged from the adversity of lost interpersonal relationships which offered social support.

More than 12 participants created images of the sky, but during the photo-elicitation phase, many of these participants spoke only generally about the sky, often alluding to fresh air, being outdoors, and separating from problems that were associated with being indoors. For example, one child who photographed the sky said, “I can do anything outside!” but later alluded to troubles that lurked inside their home. Another adolescent child stated that “At night, I like looking at the stars,” but when asked why and what the stars meant in terms of mental health, the teenager seemed to hesitate and shut down the conversation: “Probably just how far you can see.” To summarize the last two paragraphs, in this sample, the sky and its extensions—the clouds, the sun, the stars, and the landscape which it brightens—were frequently mentioned in testimony given by children of all ages in relation to mental health. While the sky was consistently mentioned, in relation to mental health and wellness, across all age groups, the meaning was diverse because it touched many categories housed across all the major themes.

Participatory Photo-Elicitation

During the photo-creation period and subsequent photo-elicitation interview, many young children chose to make portraits of their friends, their activities (or evidence of activities), and multiple elements of both the natural and built world that involved play. For example, a favorite tree that is good for climbing may also be a place where another child hides from view. This is to demonstrate that trees are photographed for different reasons and subsequently an image that is similar is the launch point for very different testimony about mental health and wellness.

Young children were the most likely to photograph one another and, with the image, explain how important the bond to that person is to them. As mentioned previously, around the age of 11, many children start to have some difficulty at expression, and yet present images of the natural environment perhaps with the intention of showing a connection to mental health. This young adolescent gave a prime example: "Let's see. It says something about nature, and then I guess . . . of wellness?" Perhaps the intention to explain more details is there, but the vocabulary, the language, and the experience that facilitate expression are not yet available to this individual.

Older teenagers connect their created images of the natural environment to their mental health in ways that might be unavailable to their younger counterparts, for example, through analogy and metaphor. Most startling was the standalone example from one teen who made a metaphor so poignantly. This teenager showed the created image of the natural landscape and then traced the contours of the land with a finger, explaining, "I was level and then my mind started going. I go down. Or I can go up. Or I can level back out again. That is kind of like me, I guess." For this adolescent child, the departures from the "level" symbolized a loss of mental health. This adolescent volunteered many details about how the loss of significant relationships had created significant departures from mental health, and how over time, healing lent itself to a point of recovery. Markedly, recovery for this teen was not about a return to exuberance, which was portrayed as equally treacherous to their mental health; rather, it was a sense of levelness, or equilibrium.

Another adolescent employed analogy by taking colors from the natural landscape and likening them to emotions: "It . . . [emotions] to me, in my mind, if I think of something like this, I think of it as a dark color [pointing to dark, dry leaves in an image]. If something's full of life, it has to be one, a bright color, but then there's multiple colors." On close observation, elicited

dialogue from the children fell into a handful of categories, with some basic properties presented in Chapter IV (see Table 6). Observably, children who employed the use of analogy and metaphor seemed satisfied with this mode of expression. This perhaps is also theoretically important as some of the difficulties and frustrations of expression experienced by pre-adolescents and young adolescents might be eased by learning how to use analogy and metaphor.

In answering the seemingly simple question, *what is mental health and wellness*, young children were also tasked with how to decide to represent a concept that is not easily visualized, and for some this posed a dilemma. Children overwhelmingly dealt with this dilemma with enthusiasm, however, signaling perhaps that talking about mental health with youth (for example, in the client-provider care setting) could potentially be better facilitated with a semi-structured period of photo-elicitation. Sometimes providers find it difficult to elicit facts and feelings about a child's home life. One major takeaway from this study is that without even involving pictures of the child's home life, much is volunteered about the home, school, and neighborhood ecologies and mental health. A few examples follow.

This older teenager said they were not sure about their concept of mental health, but then eagerly spoke in detail about their home ecology, social support, and strategies that helped them maintain their mental health:

My goal is go to the good college. I want to go to, and make my mom proud of me, but that hasn't been really good right now because I've been giving my mom really a lot of bad stuff, right now. She had to pay back a lot of people and stuff, so, that was kinda my fault, and her being mad at me and stuff. But she always forgives me the next day because, I don't know, she loves me.

Another child spoke of a challenging situation with peers that was threatening this child's well-being in the school ecology:

It's difficult because they don't even listen to the teachers. They'll just mess around. Sometimes people laugh. Like when she tries to tell us something like . . . how to take responsibility and stuff like that.

One young child described feeling partially responsible for the uncomfortable living situation they face in their home ecology. Within this testimony is also the child's unsuccessful strategy at resolving the situation:

There's this guy that really gets mad at me, and he does everything to me on purpose. I've been living with him for the past five years. Oh, I bet I'm annoying. Like sometimes I called my friend to see if I can stay with her for a while. But my grandma said *no* just because she doesn't want me to go anywhere.

A fourth child, an adolescent, chose not to have their testimony audio recorded but agreed to share thoughts, and then gave a lengthy interview about their uncertainties of their concept of the meaning of mental health as well as their own wellness. This youth shared that they had experienced a lot of past trauma in their household, which was discovered when the child was much younger. The child believed that the trauma had caused a lot of trauma-related emotional pain, which the youth was still experiencing and dealt with by drinking alcohol, to "numb my pain." The child mentioned that participating in powwow dance competitions was also a protective factor against wanting to drink. But the child was unable to relay the powerful ecology of powwow or link any potential and specific active ingredients in the powwow competitive scene to abstaining from self-medication and other self-destructive habits. This might be theoretically significant for the overlap of strategy with ecology and mental health. Specifically, because the powwow dance competition and—separately—drinking were both seen as ways to medicate pain, this participant could not give any specific details about how the ecology of powwow dance or being ready for competition conferred important protections from "pain." However, the participant could explain how alcohol briefly numbed pain and how drugs

distracted their mind from pain. A key informant, who also was familiar with having competed in powwow dance, explained that when one is intending to ready oneself for a powwow competition, it is important to stay physically healthy and abstain from alcohol. Perhaps here we can only speculate that expectations, and the culturally significant meaning of competing in powwow contribute to a participant abstaining from alcohol and substance use. However, understanding how these protective factors work, merit further research.

Mental Health and Native Identity

Many Native scholars have emphasized how supporting decolonization efforts and strengthening native identity, spirituality, ritual, and traditional culture are protective factors against suicide risk, particularly for youth (Alcántara & Gone, 2007; McCabe, 2016; Garrett et al., 2016; Stewart et al., 2016). The findings of this present research—that humor is important at least to the pre-adolescent and young adolescent populations—also resonate with scholastic work from Indigenous scholars (Garrett et al., 2016). Perhaps humor should not be taken simply as humor either. As Garrett et al. (2016) explained, the importance of humor often goes over the heads of outsiders: “Native humour [sic] as a spiritual tradition often goes unnoticed by Western culture as a powerful healing force in the lives of Native people, as it has been for ages” (p. 18).

Also, the findings in this study that the outdoors, and the many meaning of the natural elements as well as how the sky, stars, clouds, and trees carry important links to mental health and wellness—are not surprising because this too was supported by many writings from numerous Native and Indigenous scholars. Waterfall, Smoke, and Smoke (2016) explained: “Many Nations contextualized human beings’ relationship with the natural ecology as existing within a circular cosmological understanding. This circular cosmology has often been referred to as the Sacred Hoop, or the Medicine Wheel” (p. 6). The authors also showed how Native

traditional beliefs recorded through time hold that people generally possess “innate ways to heal themselves” (p. 6) from disharmony or diseases. Many healing traditions that have been commonly used in the provider client setting are shared in the book *Indigenous Cultures and Mental Health Counseling*, edited by Steward, Moodly, and Hyatt (2016). Indeed, this literature does seem to support the major themes and categories that emerged from this research which pertain to the strengths from this youth sample of a plains tribes’ population. For example, whilst many older adolescent children spoke of adversity, many also spoke of being able to see that life was full of ups and downs, and that their ability to find balance among these was part of mental health and wellness. Indeed, some of the most compelling recent work by Native and Indigenous scholars was written about finding balance through healing ceremonies, through humor, and through care that is tailored to Native lives (Stewart et al., 2016; Waterfall et al., 2016). Again, Waterfall et al. (2016) spoke to this point of balance in relation to her own and her colleagues’ mental health clients:

Many of the people that we serve are able to gain balance and wellness by returning to the traditional cultural teachings, practices, and traditional ways of life practiced by our ancestors. Our healing practices have been predicated on the principle that connection to and involvement with Indigenous cultural practices is a legitimate context for intervention, treatment, and healing. (p. 8)

Some references to Native identity and mental health and wellness were presented as fulfilling a lifestyle that is tied to healthy living, rather than a lifestyle of self-medication and addiction. See Figure 7 which displays the structure of a teepee with the explanation from an adolescent of this connection.



Figure 7. Teepee poles

It used to be a place to like go and sleep and our ancestors used to use those type of buildings I guess a lot and . . . I don't know, they just mean a lot to us. It helps you stay healthy because it just makes you think of how hard our ancestors worked to get to where we are now. And we don't just want to crush it all by doing drugs or drinking.

One finding of this present research is the numerous, but sometimes convert, references to Native culture from children. Young children often did not directly or explicitly express how Native identity, symbols, rituals, and traditions are linked to their concept of mental health, but they did photograph several symbols connected to the Tribal Nations or Native American culture and tradition. Perhaps in this plains tribes' youth sample, only a few Native American children wanted to share details about their Native identity with a non-Native interviewer (the lead investigator). However, to better understand how Native Identity may be a source of strength to youth, a youth talking circles will be convened to hear the findings from study and discuss this and other areas of strength. On the topic of Native identity, Duran and Firehammer (2016) cautioned that mental health practitioners can compromise Native identity unknowingly: "It is a significant fact that Western approaches can further traumatize patients who are traumatized by invalidating the very identity of their patients" (p. 121). They also wrote that clinical work on mental health or research must not be implemented in an "off the shelf" (p.

121) manner until a “cultural metaphor modification” (p. 121) occurs. Here, the authors are talking about the many western-style mental health therapies and their purported evidence base which, as mentioned above, may be a poor match to Native American populations. However, we might extend this to research as well. In this study, we cannot assume that young children are not using metaphor when they take a picture but do not verbalize the metaphor. Sometime visual metaphor may be implied but not spoken. During the participatory photo-elicitation process, one young child showed how they would often sit on a large, brightly painted concrete medicine wheel (see Figure 8).



Figure 8. Medicine wheel

[That] would be snow, that would be water, that would be fire, and that one would be a flower. I would sit on one, and my friend would sit on the other one, and we would just talk. I'll ask them what happened and say, "What happened", and she'll tell me. Then I will go talk to that person who made her feel sad ...That person that made her feel sad will say, "Sorry."

The medicine wheel is a healing symbol, as explained earlier by Waterfall et al. (2016). Whilst the young child did not make that verbal connection to mental health, or perhaps was unable to express the connection in ways that are reflected in this analysis of the raw data, the connection was likely intuited. This could be because the knowledge of the medicine wheel as a

source for healing and maintaining mental health may be obvious to a Native child growing up in a plains tribal community. Indeed, many community members might find obvious metaphor in the act of sitting by or even on a giant colorful medicine wheel, perhaps even if it is not verbalized in a way that turns up in the gathered raw data, or the analysis of the spoken testimony of this study.



Figure 9. Quilt

I liked it 'cause it was colorful, and whoever made it, I figure they just expressed their feelings with all those colors. They express their feelings in non-violent way. That's good.

Another child photographed Native crafts that they had just created with reeds and other natural materials in a craft workshop. The participant testified that the items “are important,” but again perhaps the meaning was intuited rather than verbalized, as the participant did not find a way to express how the craft’s importance related to identity, strategies, or a positive ecology of mental health. Another young child photographed themselves (selfie-style picture not shown) with a teepee in the background, translating the image in this way:

There's the top of the teepee. It makes me happy. It always reminded me of back . . . It always makes me think about back then. Back then, when the . . . It reminds me of a long, long, long time ago. When we [lived] like this. We had, riding on horses, no cars. And no guns or nothing' until the White men came over.

This sense of the past as a key to future wellness and mental health was also echoed by a much older adolescent child, who saw traditional ways as a means of maintaining balance of mental health (see Figure 10). This mature adolescent took an image of a painting depicting a landscape scene of teepees along a river bank and explained the following: "I think that they stayed spiritually well, for, to keep, generations going." This comment was also one of two from two children who made brief references to spirituality. The other mention of "spirituality" was by an adolescent child who said that they could seek help for alcohol cessation in another community where relatives, who were members of a church, and could help with "spirituality" and the help would be given "without judgement."



Figure 10. Painted landscape

I think that they stayed spiritually well, for, to keep the generations going.

Another adolescent who liked to hide in a tree to look down on the world gave a decided "No!" when asked about a spiritual connection to the natural environment that was claimed to be calming. These quick interactions show that we can never assume that important

connections to something such as feelings for the landscape are thought of as only spiritual, as spirituality is deeply personal, means many different things to various children, and is not always endorsed for reasons that might relate to the word itself. After all, spirituality, which is an English-language word, might better be left out, and Native language words or phrases may provide more precise terms.

Whilst all age groups had mentions of native traditions, culture, symbols, and healing—as mentioned just previously—one child related participation in a powwow dance competition to mental health. However, this example is limited because the adolescent specifically related dance participation and preparation to alcohol cessation, and not to other aspects of their mental health. Or perhaps for the participant, that was the important connection in this moment of their life and thus the only point worth explanation. However, there were many references to the outdoor ecology and aspects of the natural environment. Again, caution is needed on how to interpret these links or sentiments. Some might interpret these as spiritual and specifically part of Native identity. It is highly likely that there are many more interlocking connections to Native American identity specifically and generally that this analysis did not capture, especially as the images were not taken as part of the testimony's analysis.

Importantly, evidence of Native identity cannot not be assumed or interpreted by the lead investigator, rather, it is something that needs discussion in community talking circles, for revealing further meaning. Perhaps the most important thing that this research facilitates is the process by which the data have been gathered, grouped, and de-identified, with care taken to remove even covert mentions of friends, places, and situations that might otherwise make narratives identifiable or trigger connections to whose testimony is being discussed in this small rural community. Finally, the importance of this research is that the lived experience and personal concepts that have informed the finding of major themes and how the major themes

interlock can be explained by the sample's testimony as a starting point, not an ending point, for discussion within this community.

Limitations

There are several limitations that could not have been avoided. First, for example, the lead investigator is an outsider and not of Native American ethnicity. As such, even whilst working together with local Native American co-investigators and informants, the lead investigator still carries biases that are integrated into both the data gathering and analysis of the raw data.

Second, the season in which the data were gathered lent itself to many outdoor activities. This may have influenced the participants to think of their mental health in terms of summertime activities, pastimes, and weather.

Third, most of the children in the study are known to, or at least familiar with, the co-investigators, so this may have introduced sample bias. Although this rural reservation-based population is very small, there might have been some children who would have liked to have participated in the study but were not known to the co-investigators.

Fourth, it is important to take a step back and note how the grounded theory approach may have been a limiting factor in this research. A prime example of this is a paradox that exists when collecting qualitative data and engaging in a grounded theory process, and the decisions that come with this methodology at the inception of its use. One might note, for example, that theoretical sampling commits an investigator early to theories that must be followed through in the analysis. Certainly, the choice to sample in three different age groups as a guide to finding the saturation of key themes was one such commitment made in the early data-gathering phase of this research. Because of this commitment, other themes that might have been bound to

other types of groups might not have been noticed with the same strength or given enough focused consideration. However, there was flexibility in the decisions and subsequently in the analysis.

Eleven-year-olds were over-sampled because they appeared similar to both their younger and older peers, even as the data were being gathered. The lead investigator continued to see such similarities and found that the 11-year-old children do exhibit trends that follow the 9- and 10-year-olds, but as a subgroup are also more ambivalent about explaining their thoughts and feelings, which is similar to their 12- and 13-year-old peers. Because age 11 is a somewhat transitional age, the investigator used the constant comparison approach as a validating check on this subpopulation. However, for the purposes of this project, the 11-year-old children were mostly included in the 9/10-year-old subsample for analysis. Only in one specific query relating to ambivalent thoughts and feelings were the 11-year-old children considered together with the sample of 12-to 14-year-old children. It was therefore a limitation of this study that further analysis of the young adolescent group did not involve the inclusion of 11-year-old children.

As mentioned in the methods chapter, each day's recordings were immediately sent for transcription and the resulting text was checked within 24 hours of the interview by the lead investigator for transcription errors or misunderstandings. This key procedure allowed for timely reflection on the completed interviews. But it also may have introduced biases related to how saturation of themes was understood. For example, perhaps this method encouraged more focus on some themes that were apparent earlier rather than others, seen later. It became clear that younger and older children link their mental health to a variety of specific activities, and again had some activities mentioned later appeared early on, the investigator might have prompted participants to speak more of these traditional activities, specifically powwow, drumming and crafts, and the ecology surrounding these activities.

Implications for Future Research

Starks and Brown Trinidad (2007) spoke of how “Phenomenology contributes to deeper understanding of lived experiences by exposing taken-for-granted assumptions about these ways of knowing” (p. 1374). Certainly, we shall state the obvious that became even more clear through this research process—that children ages 9 through 17 are going through rapid development, that pre-adolescents have less access to abstract reasoning than mature adolescents, and that 11- to 14-year-old young adolescents with their rapid physical and mental development—may be the most prone to the tide of ambivalence that rises at this age. Starks and Brown Trinidad (2007) so rightly offered that the truth about some event or process is knowable only through “embodied perception” and the “essences of an experience or event” (p. 1374). Investigations made in this tradition is the work of the phenomenological analyst.

The data gathered for this project and some of the observations, at first look, echo some phenomenological findings. After all, we shared excerpts from individual narratives to best illustrate the essence of children’s experiences. But excerpts were also shared to demonstrate how categories form or how a diversity of contrasting testimony has trending thematic power, and potential theoretical importance when themes are shown to be interlocking. What separates this research project from a phenomenological one is that the analysis has a strong orientation to grounded theory processes. In this project, the “constant comparison” approach (Creswell, 2002a, p. 451) between natural groups for common indicators demonstrated how to identify indicators’ context, conditions, covariances and contingencies, all of the processes suggested by Corbin and Stauss (2015). These were of the utmost importance to validating the discovered themes. However, this work and research into validating findings in a very specific population should and will continue beyond this dissertation.

Indeed, upon completing this data analysis with the very specific intent of using the grounded research approach which allows the “data to speak for itself,” the investigator noticed trends that were both fascinating and unanticipated, yet also recognizable through the lens of developmental psychology. However, this is a very special population, and just as children reach puberty, they may also be experiencing the loss of a parent, an auntie, a grandmother—all caretaker figures—a common lived experience shown in the raw data. Perhaps a follow-up to this study, also carried out with a phenomenological research theory approach, would be to understand how the children with major loss have continued to heal, form their identity, build new interpersonal relationships for social support, and strengthen their strategies and ecologies in the face of adversity. This work may even be extended to meet with the same children 1 year after the initial elicitation period.

Findings from this study could potentially also inform an instrument that is better calibrated to plains tribes’ youth as it measures key domains of perceived mental health strengths through themes and categories grounded in the raw data of this research. Having an instrument to measure a youth population’s strategy, ecology, social support, identity, and ambivalence to their concept of mental health could allow for multivariate analysis that unearths connections between variables that are otherwise unknowable. For example, it seems that strong Native identity is a protective for children in this plains tribe community, but understanding why, or under what circumstances this may be the case might also benefit small Native-operated health programs. The call for more research on this particular point has been made by many Native scholars (Kirmayer et al., 2011). This research may also suggest that a child’s experience of having many strategies is key to that child being able to forge new and supportive social support networks, future ecologies, and a strong identity with elements of high self-efficacy. Whilst there are many existing instruments that try to get at these areas of

mental health assessment, there are few tailored to the Native American plains tribe youth populations.

Lastly, the method of participatory photo-creation for eliciting information about a child's concept of mental health may be useful in further development in the global mental health setting, where provision of mental health is nascent and primary care providers are tasked with rudimentary mental health care provision. The photo-creation and elicitation process with a youth populations can be used as a reiterative training tool. For example, cultural competency trainers might share findings with a primary care professional to help highlight where strengths lie in their youth patient population. Further development of the use of participatory photo-elicitation for youth mental health strengths-based knowledge generation is an inexpensive, fast, and tailored way to bring training and professional development to providers caring for a population with unmet needs. It can also inform emerging mental health care practices in vulnerable, marginalized, and traumatized populations.

Implications for Practice

It is important to remember that at every stage of this research, the aim was and continues to be that findings be shared in a participatory manner. In this way, program providers and their clients of this small Native-owned health promotion and disease prevention (HP/DP) program benefit the most by having a working knowledge of youth's strengths and insights into how youth "build" their own mental health and inner strengths. Indeed, the participatory research approach means that the ethics of how to interpret the findings are of the utmost importance. Whilst the above sections offer the lead investigator's interpretation as a conclusion to this dissertation, the findings will only be the beginning of a continued participatory research plan within this community. All efforts have been taken to stay true to

how the testimony portrays the lived experiences and the contexts of what has been said, whilst distilling the essence in a way that would not betray identity or any aspect of identity such as gender, residence to a specific place, or specific tribe affiliation.

Perhaps the best forum for sharing these findings and for seeing further use and application is the Native tradition of forming “talking circles.” In this capacity, groups from the community meet with their peers to listen and discuss. Teachers, students, elders, tribal council leaders, and providers may form talking circles, or talking circles may involve diverse groups from the community. Perhaps the findings may also inform the nascent social support model being developed by the HP/DP and the subsequent planned programming of this model. Through the model, the HP/DP hopes to create permanent programming opportunities that offer many diverse activities for youth, but also emphasize Native identity, traditions, and culture as a means of building strength and pride in each child. Very specific activities such as traditional dance practice, equine care and grooming, crafts, and sports (lacrosse and archery) are some of the activities that the HP/DP program hopes to make permanent. However, this research shows that adolescents also crave creative forms of expression such as journaling, writing poetry/prose, painting, drawing, non-traditional crafting, and music. The drive behind this model’s philosophy is that children will not only benefit from having activities to get involved in but will also meet other youth educators and social workers through such programming, and through these experiences form friendships and build a network of peers and mental health allies. This research is a step toward showing how the youth perspective supports activities as a strategy for mental health and wellness, and other major themes found here may lend specific support for this social support model. This project is also a benchmarking study and may be repeated at intervals to see if children’s testimony about their mental health concepts

and perspectives change over time, especially among those engaged in social support programming year after year.

Eight youth members from this community who visited New York in late March 2018 participated in the first talking circle. The findings, major themes, categories, and indicators will be tested further for their validity in other presentations of the findings in more talking circles in the reservation community. Perhaps the categories will be refined further through this meeting. These talking circles may also discuss the possible uses of these findings to support HP/DP Fort Peck youth groups and classroom activities that lend themselves to mental health advocacy. For example, several of these young community members are interested in the dramatic arts, improvised drama, and stage plays. Perhaps there is a chance to develop role-play activities based on small excerpts of the testimony. Talking circles may also discuss the Rubik's cube analogy or even create their own Rubik's cube by using stickers to detail their strategies, ecologies, social support, and identity on an actual Rubik's cube, and feel free to share how some of their themes might interlock.

Partial testimony (that remains de-identified) from this study may also be shared with the wider care provision community in a way that informs care in the school-based health centers. During the school year, to meet the high demand for mental health services, the HP/DP contracts mental health service providers from outside the community. Most of these practitioners visit the reservation but are not residents of the reservation and are not of Native American ethnicity. Some have had cultural competency training, but many may not be familiar with the youth perspective from Native American plains tribe youth. Sharing the results of this study with practitioners may serve as part of a cultural competency learning opportunity.

For many photo-elicitation projects, there is easy conversion of the material created through photography into a photovoice project, which usually entails the display of photographs

in an exhibition and an advocacy campaign with a focus on defining, raising awareness, or influencing health policy. This was never the goal for this dissertation, however, as mentioned in Chapter I, this could be a goal for the research's findings in coming months. The sharing of youth perspectives of mental health and wellness, along with the photos themselves, would require discussion with community elders before any such exhibition. Perhaps the involvement of elders and the incorporation of words in Lakota dialects could help echo some of the major themes, categories, and indicators, which would not only honor and emphasize the traditional use of language in this community, but also align with the participatory approach, goals, and customs promoted by health leaders in the community.

Area Native scholars may wish to meet and give their own feedback on this project's findings as well. For example, local leaders, elders, and scholars may want to discuss how helping youth develop or link the discovered major themes from this study to aspects of traditional Native culture, to Native identity, and to Native language may be beneficial, and if so, how best to go about creating a dialogue around such efforts. Perhaps helping children find a specific language, perhaps based on words or phrases of plains tribes language dialects, as a means of expression. Such a tailored mental health curriculum would also give children the tools to talk themselves through daily self-healing practices and rituals. This might be particularly applicable to pre-adolescent children who are frustrated by their lack of expressive language and phrases. These strength-based practices might then form the basis of nascent strategies, in addition to the already existing group practices of healing trauma and traumatic mental health wounds in this reservation-based tribal community. All these future potential practices, curricula and plans will need the continued support of the HP/DP leadership and the wider community.

In the field of health education, community-based participatory research has spawned hundreds of photovoice projects that lend themselves to defining health issues, influencing

policy around health problems, and bringing advocacy and leadership by pairing photographs with (usually) short statements from participant-investigators that highlight the most important or overlooked area of the health issue. For example, in rural areas in particular, photovoice has helped reduce stigma and empower those without voice or power to take a stand on a community health issue (Palibroda et al., 2009). Photovoice has also been used to draw funding to health problems, where possible solutions have suffered from underinvestment. But a new look at the participatory photo-elicitation process from the health educators' perspective is deeply warranted. Eliciting testimony from children about their concept of mental health following photo-creation leads to rich and diverse testimony. Whether children are sharing their metaphors and analogies, or giving expository testimony about their ideas and concepts, their participation means that their perspectives and experiences can inform other youth. For example, whilst one youth has thought of an analogy that helps with accepting a loss, and thriving despite the loss, another child may benefit from hearing this analogy. Health educators in schools, care practices, and academia may also be empowered to reach for the youth perspective through this inexpensive and participatory approach before recommending more universal socioemotional learning goals, curricula, and needs assessments. Thus, participatory photo-elicitation must not only be known to health promotion experts for its contribution to photovoice campaigns, but also for the many possibilities that the combination of qualitative research and grounded theory exploration bring, as well as the many potential types of testimony and outcomes born from such research.

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