Sharing the Medicine of Resilience: Honoring the work of Dr. Gyda Swaney

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Sharing the Medicine of Resilience: Honoring the work of Dr. Gyda Swaney

by

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Master of Arts, University of Montana 2015
Bachelor of Science, Arizona State University 2008

Dissertation

presented in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy in Clinical Psychology

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American Indians are a unique population that have been historically understudied in psychology. However, research in this field with this population has been growing and researchers are beginning to explore facets of American Indian mental health. There is a movement for American Indian psychologists themselves to conduct this research and to begin to develop culturally adapted and Indigenous research frameworks. There have been many Native psychologists who have helped push this work forward. One such Native psychologist was Dr. Gyda Swaney (Salish) who was a professor at the in the Psychology Department at the University of Montana and directed and guided qualitative and quantitative research with American Indians through the Indians Into Psychology Program (InPsych). This dissertation is composed of four major components. The first component is the memorial tribute, which introduces Dr. Swaney and gives a brief review of her academic career focusing on her work with the InPsych Program. The second component is the literature review which gives the general context of relevant resilience-based psychological research of American Indians, to situate the research of the InPsych lab. The third component is the narrative review, which introduces, reviews, and analyzes the diverse quantitative, qualitative, and mixed-methods resilience-based research conducted by the InPsych research lab. This study identifies relations within the corpus of selected research projects and identifies any connections or coinciding findings; it explains how and why individual studies fit together, and evaluates the quality of the studies, and discusses gaps in the research. It provides implications for practice and policy and outlines important directions for future research. The fourth component of this dissertation is a qualitative study which illuminates how Dr. Swaney’s focus on resilience influenced the research, clinical work, and other work of colleagues and students. Through her research she saw and encouraged resilience in the communities that she worked with. Through relationship with others, she supported, guided, and strengthened her fellow colleagues and students. Finally, a general discussion will provide a brief overview of the four major components and briefly discuss implications for future research with American Indians, mentoring future Native psychologists, and Dr. Swaney’s legacy.
Dedication

This dissertation is dedicated to the late Dr. Gyda Swaney. May her work, memory, and love live on in the many lives that she touched. May I meet her again in the next world.

Hózhóógo náás náánéidáał dooleeł; May you walk in beauty always;
Hózhóó náhásdlíí. In Beauty it is finished.
Acknowledgments

I would like to thank Shimá Carole, my father Randy, the InPsych Program, Dr. Paul Silverman, Dr. Duncan Campbell, my son Lucas for inspiring me, and the amazing students of the InPsych research lab. Thanks to all those who have come before me who have given me strength, my family and many teachers, colleagues, and friends who have supported me on this long journey. And of course, Dr. Gyda Swaney.

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Sharing the Medicine of Resilience: Honoring the work of Dr. Gyda Swaney

Author’s introduction

Yá’át’ééh shik’éí dóó shidine’é. Shí éí Matthew Croxton yinishyé. Page, Arizona déé’ naashá. Kinlichíi’nii dine’é éí nishłį. Bílagáana dine’é éí báshíshchiín. Tódích’íí’nii dine’é éí dashicheii. Bílagáana dine’é éí dashinálí. Ákótéego hastiin nishłį. Hello. My name is Matthew Croxton; I am Navajo (Diné) and originally from Northern Arizona. I am Red House Clan and Bitter Water Clan on my mother’s side. My parents are Randy Croxton and Carole Croxton (Tsosie). In the summer of 2008, while I was completing my Bachelors of Science degree at Arizona State University, I attended a 6-week InPsych Summer Program where I met Dr. Gyda Swaney. A year and a half after completing the summer program and graduating from Arizona State University with a Bachelor of Science, I applied to graduate school at the University of Montana. My introduction to the InPsych program and relationship with Dr. Swaney were important parts of my decision to apply. Dr. Swaney accepted me as her student, meaning that she had agreed to guide and support me through a very strenuous and rigorous academic program through the highest level of education. After beginning school, I began to work on my thesis, which was a formative introduction to research with American Indians. I was also able to work a bit through the Confederated Salish and Kootenai Tribes, in the Behavioral Health Program and at the Tribal Defender’s Office. I completed a predoctoral internship at the Indian Health Board in Minneapolis, Minnesota.

I am writing within perhaps two frames of reference – as a scientist, but also as someone whose life was touched by the late Dr. Gyda Swaney, and who is attempting
honor her, and give back in an attempt at reciprocity. This dissertation is somewhat unique in that it is both academic (being a dissertation) and somewhat personal because she touched my life. It is a most difficult task to honor someone like Dr. Swaney, but the attempt is something that is most needed, as she was an amazing person and professor. I will therefore make the attempt, even though I am likely to come up short. I reflect often on her guidance and carry that wisdom with me. There were many times that I felt emotional while completing this dissertation, in both appreciating her relationship and investment, and in feeling her loss.

Most dissertations are written within the Western academic framework with the author as objective and neutral. To be transparent, I wrote this dissertation without the intent to remain a fully detached and objective observer. I might be inclined to say that, in fact, I wrote this dissertation because of my relationship with Dr. Swaney, and that I was driven by a felt need to honor her life, her academic career, and her work with students. As a result, I approached this dissertation from a combined ideology that makes use of both Western and Indigenous frameworks. Relationality and reciprocity are recognized components of research with the Indigenous perspective (Wilson, 2008). It was Wilson who said that “research is ceremony.” Dr. Swaney brought the Indigenous perspective to all of her work.

I believe that if it were not for Dr. Swaney’s efforts, I would not have been able to pursue a doctorate in Clinical Psychology. She was a mentor, an advisor, supervisor, colleague, and friend. At times she trusted me more than I trusted myself, and it was her belief in me that helped guide me through the many challenges of graduate school. She saw the good in people, which allowed her to be so kind. I am pleased to claim her as
my mentor and part of my academic lineage. I am sure that her influence will still be felt
decades down the road and will continue to echo through the many lives that she has
touched.

She spoke of a Salish word that meant something like “where the magic happens
between us.” She spoke of this word in relation to resilience within relationships,
although I now think about this word as being part of a space that she carried with her
and shared with her colleagues, co-researchers, and students. Many of my graduate
school projects - presentations and posters - were completed with Dr. Gyda Swaney;
some I completed on my own, but I would have never been able to do so without her
guidance and mentoring. She worked so very hard to improve the lives of Native
people. She did this in her own clinical work, work with mentoring and growing Native
psychologists, and psychological research with local Native people. Her effort and
dedication were immense. She was an invaluable resource. In my research, Dr. Swaney
showed me a Salish word for resilience – *Nyawyols* – “root is strong” (from Pat Pierre,
Salish Language Institute). She was a diamond in the rough... truly, her root was strong.

The manuscript that I present in these pages includes three major components.
A brief memorial tribute, similar to the introduction for a festschrift, serves as the first
component. That is followed by a review of the literature regarding stress, coping and
resilience among American Indian and Alaska Native persons. The final two sections
are (1) a narrative review of the research of the InPsych Scholars who benefited from
Dr. Swaney’s wisdom regarding Native resilience, and (2) a qualitative analysis of
interviews done by me with Dr. Swaney’s students and colleagues. These interviews
focused on Dr. Swaney’s impact on the field and on the interviewees’ own approach to
research and clinical practice with Native persons. The dissertation project closes with a general discussion that ties all elements together.
Part 1: Memorial Tribute

Introduction

University of Montana

The University of Montana is located in Western Montana, in the state’s second largest city of Missoula. I was told by Dr. Swaney that the name of the city – Missoula – comes from the Salish word Nmesuletkʷ meaning something like “Place of the frozen waters,” a reference to Glacial Lake Missoula, indicating that the Salish people had been in the area for a very long time. At the University, there is a Psychology program and a Psychology Department that offers undergraduate and graduate level curricula. The Psychology department also has a Clinical Psychology Program that offers a terminal Ph.D.; students enter with a Bachelors degree and leave with a doctorate. The program is a scientist-practitioner model and is accredited by the American Psychological Association. Curriculum includes classes, practicum, and research projects (theses and dissertations). A yearlong internship is also required as part of the Ph.D. The program is highly rigorous.

Indians Into Psychology

The Indians Into Psychology Program was established as a federally funded program through the Indian Health Service in 1992 as part of the Indian Health Care Improvement Act of 1992 in an effort to recruit and train American Indian psychologists, who are underrepresented in the field of psychology. Indians Into Psychology programs have been established at The University of Montana, the University of North Dakota and Oklahoma State University. Students must be enrolled in a federally recognized tribe in order to apply to the program. The Indians Into Psychology program (known as the
InPsych program at UM) began at the University of Montana in 1997 with Deborah Pace PhD as the InPsych Program Director. In 2001 Dr. Gyda Swaney became a professor at the University of Montana and took over leadership of the program. American Indian students who were enrolled in federally recognized tribes were recruited into the program and were financially supported by the InPsych scholarship. Currently, seven Ph.D.s have been awarded to Native Students who were InPsych scholars. Other students who participated in the lab were members of state recognized tribes but not federally recognized tribes, or were Native students who declined the IHS scholarship. In total, there are about five such non-InPsych Native students, all which have graduated. Non-Native students also participated in the research lab. The program is currently co-directed on an interim basis by Drs. Rachel Williamson and Duncan Campbell.

**Dr. Gyda Swaney**

Dr. Swaney was born in 1951 and grew up in Hot Springs, Montana. She graduated from Hot Springs High School and then went on to Pacific Union College, transferring eventually to the University of Montana. In 1981, she earned a Bachelor of Arts degree in a double major of psychology and sociology from the University of Montana. In 1986, she graduated from the University of Montana with a Master of Arts degree in Clinical Psychology. She then completed a yearlong internship at Boston University School of Medicine. Dr. Swaney also served as a clinical supervisor for the Addiction Treatment and Mental Health Programs at the Confederated Salish and Kootenai Tribes from 1987-1999. In 1997, she earned her PhD in Clinical Psychology, also at the University of Montana. Her dissertation was a program evaluation of the
Confederated Salish and Kootenai Tribes’ Behavioral Health Program. From 2000 through 2009, while also serving on faculty at UM, she served clients at Spring Creek Mental Health Associates in Ronan, Montana. In all, Dr. Swaney worked almost 30 years in the field of behavioral health, primarily working with American Indians.

From the Spring of 2001 through the Spring of 2018, she taught undergraduate and graduate classes at the University of Montana; she often taught Applied Clinical Methods (practicum) and Multicultural psychology, but she also taught Abnormal psychology, Ethics and Professional Issues, a Special Topics class, Interventions, and Intergroup Dialogues. From 2001 through 2019 she also worked as the Program Director of the InPsych Program. She recruited students to join and mentored them within the InPsych Program in an effort to train Native American psychologists. An immense investment is needed to mentor such students, as they are guided through master’s degrees through to a PhD. She also directed and ran the InPsych Summer Program, an annual event designed to introduce undergraduate students to the InPsych program, graduate school, the field of psychology in general, and essential issues of working as a Native psychologist. She also helped conduct the Mental Health Career Opportunities program (MHCOP). She inspired, mentored, and supported an untold number of students while at the University.

Dr. Swaney’s research was focused on Native Americans, in areas such as resilience, grief, historical trauma, and health disparities. Much of her research was focused on resilience in American Indian Older Adults, which was a part of The Native American Resilience Project (Wallace & Swaney, 2007b), a qualitative and quantitative research project she started and co-directed with Dr. Kimberly Wallace. Dr. Wallace
was interested in examining resilience in American Indians. She also guided the theses and dissertations of the 10 students she mentored in the InPsych program; these projects were focused within American Indians but were varied in their focuses and approaches.

Dr. Swaney served in leadership roles at local, state, and national levels. She also worked extensively with the Confederated Salish and Kootenai Tribes and Salish Kootenai College and other tribal organizations. Dr. Swaney was an active member of the Society of Indian Psychologists, and regularly participated in and attended their conferences. She also had leadership roles in the Montana Psychological Association--including four terms of service on the Board of Directors, and as a Diversity Delegate. She also represented Montana psychologists nationally in serving as the state’s Council Representative to the American Psychological Association. She had numerous grants, mostly dedicated to researching mental health issues in American Indians. Dr. Swaney was highly effective at navigating the difficult role as a Native psychologist in working with the sometimes conflicting ethical systems and values of Indigenous and Western cultures.

Dr. Swaney had received numerous awards during her professional career. These included the Charles E. Kelly Memorial Award from the Montana Psychological Association, The Nancy Borgmann Diversity Award from the University of Montana, the 2012 Award for Outstanding Achievement to the Montana Psychological Association by the American Psychological Association, the Racial Justice Award from YWCA in Missoula, Missoula MT, seven Certificates of Appreciation from the Office of Student Affairs at the University of Montana, a Certificate of Appreciation from the McNair
Scholars Program, an award for service as a Faculty Mentor, a Certificate of Appreciation from the Faculty Senate for service as Chair of Graduate Council from the University of Montana, a Certificate of Appreciation from the McNair Scholars Program for service as a Faculty Mentor, a Cash Incentive Award for Outstanding Performance in the Mental Health and Addiction Treatment Programs from the Tribal Council, Confederated Salish & Kootenai Tribes, Pablo, MT, a Certificate of Appreciation from the Flathead Culture Committee, she was a six time Alice K. Phillips Scholarship awardee from Native American Studies Program, University of Montana, and five time awardee of the K. W. Bergan Scholarship from the Native American Studies Program at the University of Montana, and two time awardee of the Indian Fellowship Program from Indian Education at the Department of Education in Washington, DC, and an Outstanding Alumni Award from the Native American Studies Program at the University of Montana. As you can see, she had awards at the National, tribal, and University level.

Even though her work took her into state and national communities, she still had time for her students. At one time while I was a student at the University, she was working as a clinician, working as a professor, volunteering in the community, and serving in multiple leadership roles.

Dr. Swaney once asked me a question, “Have you ever heard of Ginger Rogers?” I replied that I hadn’t. She stated that Ginger Rogers was Fred Astaire’s dance partner, but that during their dance scenes, she did everything that he did, but backwards and in high heels. Dr. Swaney was relating how Native psychologists who work with American Indians must do everything psychologists do, while making it culturally adapted. Just as Ginger Rogers, their amazing work often is not fully
recognized. Her work as a psychologist and professor was amazing, and this dissertation is an effort to illuminate that work and recognize her seemingly limitless dedication and kindness.
Part 2: A Literature Review to Introduce Resilience in American Indian Older Adults

Preface

A brief preface to this introduction – the following literature review was formulated and written with the intent of conducting a resilience-based quantitative study using archival data gathered with a sample of American Indian older adults. That study was proposed but was not completed, due in part to changes in IRB procedures that unfolded after the proposal but before the project was completed. The revised dissertation plan presented here still covers resilience in American Indians, but through a slightly different lens and with a new purpose of presenting a context for the review of research produced through the InPsych research lab.

Introduction

How individuals experience stress and cope has been an area of long-standing study in psychology. It is necessary to understand what causes stress, sources of stress, and how stress is perceived and responded to through coping. American Indians are a particular group of people who have faced extraordinary stressors and remained resilient.

Essential Elements

The major components of the literature review consisting of stress, coping, and resilience will be briefly described.

Stressors

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1 Within this document, the terms Native American, American Indian, and Indigenous, all refer to the same group. The names for specific groups such as Salish, Navajo (and Diné) will also be used. Native groups in Alaska are termed Alaska Natives, Native groups in Canada are termed First Nations; these terms will show up as well.
Stressors are events that cause a demand on an individual (Hobfoll, 1998). These events can be either positive or negative; what is essential is that the individual perceives a demand on their psychological or material resources that they might not be able to meet. American Indian older adults have faced and continue to face both ordinary life stressors and additional stressors as part of being American Indian – such as historical trauma, racism, health disparities, and lower socioeconomic status.

**Coping**

Coping is a response to stress that refers to cognitive, emotional, and behavioral responses that individuals employ to confront or avoid stressors and conserve resources (Hobfoll, 1998; Lazarus, 1993). Coping also feeds back and affects the environment, which creates complex relationships between stress and coping. Concerning older adult and elderly American Indians, there are a few apparent things that can influence coping, such as culture, history, mental and physical health, social roles, and social relationships.

**Resilience**

How individuals experience stress and cope has been an area of long-standing study in psychology. A developing area is research on resilience within individuals and groups, with the intent of identifying specific elements that contribute to well-being in the face of adversity. A focus on resilience helps to offer a more complete picture of mental health and provides a means through which supportive aspects of health can be studied (Belcourt-Dittloff, 2006). It is also warranted to explore resilience in a population that has often been pathologized for psychological and behavioral sequelae following colonization.
Problem Statement

American Indians have made it through extraordinary stressors, continue to do so, and many remain healthy. Although there is the existence of mental health and physical health disparities (Indian Health Service, 2016), there is resilience and strength in the population of study. These individuals have used culturally based strategies to effectively cope with the life stressors they face and have faced. An important area of investigation is the understanding of what life events and stressors older adult and elderly American Indians may face and what effective coping mechanisms and approaches they employ with specific stressors (Schure, Odden, & Goins, 2013).

Significance of the Review

The identification of sources of resilience for this population could help inform policy and clarify the relationship between stress and resilience. If there are common stressors that are particularly challenging, it may be possible to intervene to ameliorate these stressors or change the way they are perceived so coping can be more effective. Additionally, it might be possible to encourage more effective coping, and/or reduce less effective coping behaviors as they relate to stressors (Coyne & Racioppo, 2000).

Organization of the Paper

This literature review is an introduction to stress, coping, and resilience. This will be discussed to better define how resilience occurs. These topics will be discussed as they relate to more general domains and then more specific domains as they relate to American Indian older adults. After this introduction reviewing these major areas and discussing resilience in American Indian older adults, the third section will consist of a narrative review, which examines the resilience-based research of the InPsych research
lab in order to analyze the efforts and inform future research efforts. Finally, I present results from a qualitative study examining how Dr. Swaney’s focus on resilience helped shaped the approach her students and colleagues took in their own research and clinical practice with American Indian clients, communities, and research participants.
Part 2 Literature Review

Introduction

As a group, American Indians have faced hundreds of years of colonization and resulting stressful conditions that, in turn, have created opportunities for American Indians to be resilient. Denham (2008) argues that for American Indians, resilience and resistance are potential responses to historical trauma. Coping behaviors are a part of resilience; coping such as strengthening relationships helps build the capacity for resilience through social support. This is especially true for American Indians as shown by more than two decades of research (Croxton, 2015; Gilgun, 2002; Grandbois, 2008, HeavyRunner & Morris, 1997; Kahn, Reinschmidt, Teufel-Shone, Oré, Henson, & Attakai, 2016; Kirmayer, Sehdev, Dandeneau, & Isaac 2009; Oré Nicolette Teufel-Shone Chico-Jarillo 2016; Ramirez & Hammack 2014; Rasmus, Allen, Connor, Freeman, NTCAB, & Skewes, 2016). This burgeoning growth of research also is true of approaches that are culturally sensitive, geared toward creating positive and productive change for communities, and research that engages community-based participation (CBPR; Israel, Schulz, Parker, & Becker, 2001). The area of psychological research with American Indians is gathering momentum and efforts to elucidate mental health factors that affect American Indian resilience should persist.

I will first focus on how individuals experience stress, make it through difficult times, and maintain their wellness. Sources of resilience help to buffer against stressful events, help to create a complete picture, and are an essential component of health and wellness (Begun, 1993; Belcourt-Dittloff 2006).

Resilience as a model
The psychological literature on resilience has been rapidly developing and is being refined (Masten, 2007). Seligman and Csikszentmihalyi (2000; 2001) have argued for the incorporation of positive psychology into the general field to reduce bias and examine how individuals develop and are resilient. The authors also recognize there may be strengths that are culturally specific. Clinical psychology researchers have previously focused on a deficit model of mental health (Seligman & Csikszentmihalyi, 2000). As a result, Seligman and Csikszentmihalyi (2000) encouraged research to focus on how individuals cope with stress, remain healthy, and are resilient. Hansen (2013) asserted that as funding sources have focused on health disparities, research has become more deficit-focused and has failed to identify resilience, which has led to misguided health policies. Similarly, Begun (1993) has argued that a model that incorporates vulnerability, risk, and resilience is better able to capture the complexity of human behavior, prevents fixation on pathology, and encourages a more in-depth and more comprehensive analysis.

A need for research. In 1988, Dinges and Joos pointed out that researchers had virtually ignored stress, coping, and healthy relationships among American Indian populations. Later, Hobfoll (2002) noted that almost no researchers had conducted studies that examined resilience in American Indians. Although this is changing (Belcourt & Denham, 2008; Grandbois & Sanders, 2009; HeavyRunner & Morris, 1997; Jackson & Chapleski, 2000), there is ample opportunity to expand on the relatively small amount of research examining American Indian mental health, and an even more significant opportunity to contribute to research investigating resilience in American Indian older adults and elderly (Grandbois & Sanders, 2009). As an aside, for the
purposes of this review, older adults and elderly refer to those persons who are aged 55 years and older. The review also makes the distinction between elderly adults, which connotes age, and elder, which is a social status incorporating wisdom and the role of guidance. Roh et al. (2015) noted the projected growth of older adult and elderly American Indians, the presence of depression, and the importance of their social roles and responsibilities. This suggested the importance of examining depression in this growing population.

Research with American Indians is complicated, in part, due to the lack of appropriate assessment instruments and measures. Researchers have examined very few assessment tools carefully and thoroughly for use with American Indians. As a result, we know very little about how measures perform with American Indian populations.

Numerous researchers have studied American Indians, but the research has not consistently been beneficial; in some instances, the research has harmed tribal communities (Norton & Manson, 1996; Havasupai Tribe of the Havasupai Reservation v. Arizona Board of Regents and Therese Ann Markow, 2004). It is critically important that researchers who work with American Indians collaborate with them in a way that is respectful and benefits the participating tribal communities (Bagele, 2011; Norton & Manson 1996; Weber-Pillwax, 2001; Wilson, 2008) because of past policies and practices that marginalized American Indians. In fact, this characterizes research done under the guidance of Dr. Swaney. This approach empowers a population that has typically lacked the opportunity to work with researchers in a relevant, collaborative, or beneficial way. It is imperative that researchers foster a reciprocal relationship with their
research participants and communities (Bagele, 2011; Wilson, 2008). According to Hansen (2013), the goals of Indigenous research must include a balance of power, trust, and ownership (see also Castleden, Garvin, & Huu-ay-aht First Nation, 2008), as well as align with the values of Western and Indigenous science (Witt, 2007). Other researchers have also focused on the need to build equitable partnerships based on trust and reciprocity (Cardinal, 2001; Wilson, 2001; Kovach, 2009). Finally, Fleming and Ledogar (2008) cite a need for Indigenous researchers to be engaged in resilience research, as they can offer different perspectives.

Dinges and Joos (1988) list issues deserving attention within American Indian populations regarding stress, coping, and health. They recommended the study of psychosocial factors that can increase positive outcomes of interventions designed to reduce the effect of stressful events. They also suggested researchers conduct studies to examine the relationship between social support and health in the context of stress. They advised that research should explore outcomes of stressful events that are either neutral or positive, particularly when analysis has predicted negative consequences.

Coyne and Racioppo (2000) identified a significant gap between coping research and research-informed coping interventions. The authors recommended a different methodology to study coping to make research more relevant to interventions and to improve the coping skills of clients. Additionally, Norton and Manson (1996) proposed that research with American Indians should be useful, should translate into meaningful applications, access financial or grant resources for programs, and create more effective interventions. Likewise, Straits et al. (2012) identified guiding principles for researchers working with American Indian communities. One of their central tenets is
community relevance, which consists of conducting research that has importance and will be of use, given a particular community’s culture and epistemology. The authors also recommend that researchers who work with American Indian communities develop and disseminate knowledge that creates solutions to Tribes’ specific problems, benefits community health, and helps improve health-related policies.

Bronfenbrenner’s model of social development has been able to adequately capture both small and large-scale phenomena that influence people’s experiences (Bronfenbrenner, 1995, 2001, 2005; Bronfenbrenner & Ceci, 1994). Goodkind, Hess, Gorman, and Parker (2012) suggest that a broad context must be recognized to understand trauma and healing with American Indians. Engel argued that a biomedical model was unsuited to understanding health and proposed a biopsychosocial model that was broader and more encompassing. Lehman, David, and Gruber (2017) have taken the two models of Engel and Bronfenbrenner and developed a dynamic systems model by expanding the biopsychosocial aspects posited by Engel and incorporating Bronfenbrenner’s elements of micro/macro systems and time. The new integrated model maps system components that can change each other and shows that aspects of these components differ in salience to the individual and can be either more central or peripheral.

**Stress**

Chronic stressors can challenge an individual's resilience over long periods of time. A chronic stressor might be a long-term health condition or poverty. Consistent environmental stressors appear across the lifespan of American Indian individuals (Evans-Campbell, 2008) and perhaps even beyond "chronic," as stressors that have
been introduced by colonization have appeared across hundreds of years and across generations (Brave Heart & DeBruyn, 1998).

Stress research has developed from studies that focused on the physiological components of stress and reactions to physical stressors to more recent models that relate and capture a well-developed picture of the stress experience of an individual or groups. For example, Yerkes and Dodson (1908) identified the relation between stress and performance due to arousal. Yerkes and Dodson portrayed this relationship as a curvilinear relationship and described it as an "inverted u"; performance is highest when stress occurs at an optimum level of stimulation. It is this relationship that indicates performance depends on the level of arousal and that stress can provide beneficial motivation.

The Diathesis-Stress Model is another well-known model of stress and health. Monroe and Simons (1991) defined important aspects of how stress has been conceived from the perspective of the diathesis-stress model in relation to depression: "The diathesis-stress model describes a resulting interaction of genetic vulnerabilities and environmental stress on a person's physical and mental health" (Goforth, Pham, & Carlson, 2011, p. 502). Rosenthal (1963) originally developed the model to describe the origins of schizophrenia. The model has been used extensively in research to describe the relationship and interaction between individuals and their environment. Monroe and Simons (1991) touch on essential aspects of the model, including the quality of stress, temporal characteristics of stress, and significant versus minor events.

Finally, information is available on diatheses (e.g., genetic, psychological, biological, or situational vulnerabilities) and stressors for specific disorders; this has
provided a foundation for empirically based hypotheses about diathesis-stress interactions. Researchers and clinicians have previously outlined such interactions for depression.

The Hobfoll (1988, 1989) model defines stress as a reaction to the threat of an individual’s valued resources, and notes that individuals act to conserve these resources and thereby reduce the stress they experience. These resources include physical objects (such as a car), personal characteristics (such as self-efficacy), or conditions (such as having job security). Furthermore, Hobfoll states stress will also occur when an individual’s attempt(s) to secure resources fails, for example – losing a significant amount of money in a business investment.

Walters and Simoni (2002) developed a stress-coping model in which they described stressors and buffers that result in health outcomes specifically for American Indian women. Their Indigenest Stress-Coping Model identifies stressors such as historical trauma, discrimination, traumatic life events, and physical/sexual assaults and abuse. Their model identifies cultural buffers (e.g., positive identity, enculturation, spiritual coping, and traditional salutogenic health practices) that can help minimize the effect of the stressors and counteract them. Although the model focuses on adverse health outcomes, the model also shows that it is possible to reduce the effects of stressors via cultural buffers specific to American Indians.

The Indigenist Stress-Coping Model provides a useful framework from which to study stress, coping, and resilience. While the model was developed to capture the stress and coping processes of sexual minority American Indian women, the model also should be able to be applied to American Indian older adults and elderly. The significant
elements of the model include trauma, cultural buffers, health outcomes, substance use outcomes, and mental health outcomes.

In summary, several models have provided useful frameworks to explore stress and coping.

**Facets of Stress**

In the next section, the following aspects of stress will be presented systematically: the environment, epigenetics, groups, individuals, American Indians, and older adults.

**Stress and the environment.** The environment is a single but inclusive term and in this section is defined as those many elements that are not inherent to the specific scope of an individual's body or lifespan. Environment, therefore, includes physical, social, economic, political, legal, and historical elements, and can vary or change across time. Bronfenbrenner (1979) broadly defined environment in his Ecological Theory Model. All individuals and groups can experience stress in general. However, the relationships that groups have to the stress can change, including the source of the stress, the pathway of the stress, and how the stress is manifested. For example, shelter is a basic need, and accordingly there is stress experienced in relationship to shelter; however, why shelter is needed could change depending on the environment, e.g., temperature, rainfall, need for protection against animals or insects or wind, available resources, need for permanent or temporary structures, and available construction materials. A lack of resources, including knowledge and support (e.g., how to build a shelter or lack of social support/assistance with building the shelter) can result in stress.
The long-term experience of a constant stressor can result in chronic stress, which can have effects on mental health and social support. Bilotta and Evans (2013) reported environmental stressors could lead to chronic stress if individuals cannot escape or change the stressor. They associated these environmental stressors with lower socioeconomic status, poorer housing, and lower neighborhood quality. Cutrona, Wallace, and Wesner (2006) indicated poor neighborhood conditions could contribute to stress and can result in depression through a diminished social environment. Similarly, Holahan and Moos (1981) conducted a longitudinal study of the effect of social support on psychological maladjustment. They found that reduced social support resulted in greater maladjustment and vice versa.

It is important to acknowledge that the characteristics of both the environment and the individual can work in combination to either increase or reduce stress. J. C. Quick, Nelson, Quick, and Orman (2001) proposed a theory that matches characteristics between the person and environment across three specific dimensions: control, uncertainty, and interpersonal (self-reliance and social support). The isomorphic theory integrates the Ecological Model of Stress (which emphasizes the role of the environment) and adaptation (which highlights the part of the individual) by creating a bridge between the two and connecting the corresponding characteristics.

Schnittker (2010) extended the research on isomorphic theory into gene-environment correlations. More specifically, he described three primary forms of correlations between person and environment, categorizing these matching characteristics and influences as active, passive, or reactive. He described a pair of characteristics between person and environment as passive when an individual is born
into an environment connected to family genes. An example of a passive correlation may be an Indigenous person born on the land of their ancestors. The correlation is active when an individual's genes play a role in how they choose or change their environment. An example of an active correlation is someone moving to where the weather is cooler because that is where the person feels most comfortable, or that is what the person needs to better function. The correlation is reactive when the environment responds to an individual’s genes. An example of a reactive correlation may be when an individual receives more social support due to a developmental disability. Schnittker argued that the experience of stress does not have to result in physical health or mental health problems, but that appropriate and adaptive behavior can reduce stress. This adaptive coping results in a decrease in environmental stress.

Claessens and colleagues (2010) have examined the aspect of time in relation to duration of stress, antecedents and consequences of stress, and stress with development. They studied the effect of early life experience of environmental stress on individuals. Claessens et al. (2010) studied the effect of the environment from a developmental perspective, through the examination of early experiences of stress and how these resulted in the development of observable characteristics (such as behavior) and how the growth can depend on specific individual experiences. Their study showed that stress does affect such things as behavior, but that stress experienced early in development does not always result in pathology.

It is important to understand the role of the environment regarding stress and to contextualize responses to stress in both the individual and environment. It may be somewhat artificial to define the self and environment as a dichotomy, particularly when
there is such a close connection between the two and the line can often be blurry.

Following is a section that will blur the line between the environment and individual even further; however, additional discussion of aspects of stress as they relate to the current review will help bring to light the subtleties of stress and environment.

**Stress and epigenetics.** Karatsoreos and McEwen (2011) examined the process of allostasis regarding stress and neurobiological and behavioral effects. Because of their research, they suggested several vital areas that epidemiological research should investigate, more specifically stress and its long-term effects. The authors proposed a focus on the neurobiological, behavioral, and epigenetic effects, as well as how these effects of stress manifest across generations.

Similarly, Yehuda et al. (2000; 2007) studied the effects of stress across generations. The authors investigated cortisol levels of the offspring of Holocaust survivors diagnosed with posttraumatic stress disorder (PTSD). They examined the effects of PTSD on parents and their offspring, associated levels of cortisol, and the presence of PTSD between generations. The results of their studies indicated that exposure to trauma alone was not a predictive factor in offspring developing PTSD; however, in those parents who developed PTSD, their children were more likely to have lower levels of cortisol, which is a risk factor for developing PTSD. Their study showed that the biological changes that occur because of trauma could be transmitted from parent to offspring, supporting the idea that vulnerability to stress spreads across generations through multiple pathways.

In examining health disparities in American Indians, Brockie, Heinzelmann, and Gill (2013) offer a framework that explains how the effects of trauma can be transmitted
and result in physical and mental health problems and reduced lifespan. The authors reported that the exposure to Adverse Childhood Experiences (ACEs) results in epigenetic changes that contribute to increased rates of PTSD, suicide, and decreased life expectancy. In contrasting the endurance of the effects of biological versus social processes, Dias, Maddox, Klengel, and Ressler (2015) reported that epigenetic influences could last longer than the effect of social transmission if the process of social transfer is interrupted – even after four generations. Biological or epigenetic changes can endure the effects of social processes. An example may be the intergenerational effects of trauma despite social or cultural changes that have recently been created that eliminate those same traumas from recurring. The authors argued that the biological transmission of environmental events/information can still affect the function of genes despite a shifting social environment. To reiterate, while there may be specific characteristics of the social environment that have changed, the biological transmission of trauma remains uninterrupted and can continue to be manifested even after many generations.

Additionally, Harper (2005) states that the experiences of a mother can be transmitted to a fetus and result in epigenetic changes. This intergenerational transmission is yet another pathway that links parents and offspring. Some American Indians live in environments where trauma has had a powerful presence due to the direct and indirect effects of colonization, and these effects have been at work for generations.

**Stress and groups.** Hobfoll (1988) argues that stress is defined differently depending on cultural perspectives. He points out that psychology originates from a
traditional, Western, academic, individual framework and has conceived of stress as being internal, individual, and experienced within one's mind. He asserts a broad lens must be used to understand how an individual experiences stress. He argues the perspective must be comprehensive and less constrained by cultural values. This perspective should examine the individual, the individual situated within the family, and the individual within social groups. He emphasized individuals can overcome stress alone, by working together in social groups, or in relationships with others. Hobfoll (1998) argued that the appraisal of stressful events connects to our perceptions. He asserts that these perceptions are cultural and shared among members of a culture. Just as individuals share these perceptions or internal experiences, a group can experience events based on being part of a common culture. With American Indians, these events can sometimes result in increased social integration into their tribal communities, or enculturation (Belcourt-Dittloff, 2006).

As mentioned previously, stress is motivating factor that enables survival, both on the individual level and on the level of genes and social groups. Hobfoll believed individuals would work either individually or together to meet goals related to their existence and the goals of their families and social groups. The social structures that provide for the sharing of resources related to survival are held together by cooperation. The process of sharing resources enables both the individual's and the group's persistence and therefore group survival. Finally, Hobfoll maintained that social status within these groups will be valued, as this may promote access to resources and may reinforce existing social structures. Hobfoll’s perspective concerning stress and groups relates to the ability of American Indians and their experience of stress, which directly
relates to the current study. The theme of stress, individuals, and groups will be a continued theme of this review.

Gender roles and culture are intertwined; these two components can influence each other in some interesting ways and can also be associated with different experiences of stress and coping. The concepts of individualism and collectivism have been examined by Hobfoll, in combination with gender. It is now necessary to define indirect coping, which is defined as coping that manipulates components associated with the stressor that would then in turn affect the stressor, while not initially changing the stressor itself (Dunahoo, Hobfoll, Monnier, Hullsizer, & Johnson, 1998). Hobfoll states that in US culture, which is more individualistic, women are more likely to use indirect coping because the direct channel of action is not always available due to gender bias and the social roles of women and men. In contrast, most American Indian cultures emphasize group life and extended family (Aragon, 2006). Navajo culture is more collectivistic, and is also matrilineal, often focusing on and empowering the role of women. In individualistic and collectivistic cultures, stress and gender interact and appear differently.

There are considerations concerning the “double jeopardy” of individuals suffering from racism and sexism, and how this creates elevated risk for the development of health-related problems. For instance, American Indian women are at high risk for developing HIV/AIDS. "In recent years, Indigenous scholars have hypothesized that experiences of historical trauma and ongoing discrimination are linked to communal and individual contemporary health and health behaviors” (Walters, Beltran, Evans-Campbell, & Simoni, 2011, para. 4). Walters and Simoni (1999) found
within American Indian women, trauma was a predictor of HIV risk. The authors also found that substance use played a role in the risk of sexual assault and risk of sexual health problems. This is an area of concern that requires particular attention, as well as prevention and intervention efforts.

Kirby (2008) studied stress resulting from socially-relevant life events in American Indian older adults and elderly. She examined how stressful events experienced within an individual's social network (e.g., network stress) were associated with differing levels of depressive symptoms, with a moderating effect of empathy. She found that individuals who had lower levels of empathy were not affected by the stressful life events that happened to others and did not show an increase in symptoms of depression. Kirby also found that for individuals with higher levels of empathy, stressful life events positively correlated with higher levels of depression. However, when she defined stress as overall perceived stressfulness (total level of stress resulting from stressful live events experienced during the last year) and when she accounted for the level of reactivity (i.e., how upset the individuals were because of the event), she did not find a moderating effect. Her findings suggested that a higher number of stressors correlated with secondary stress for those participants reporting higher levels of empathy. The results related to the examination of overall perceived stress suggest that empathy does not change levels of stress contagion when considering the perception of the network stress; higher or lower empathy does not affect stress contagion when individuals think about their overall perceptions of others' stress. Her findings support the hypothesis that people can tolerate being upset about a stressful event, but that the number of stressful events can affect one's mood.
After the traumatic events of 9/11, Lucas-Thompson and Holman (2013) conducted a study in the US and examined the effect of adverse social environments and economic stress between genders, the role of a specific oxytocin receptor gene, and outcomes of symptoms of trauma and daily functioning. Gender played a role in moderating the associations between adverse social environments, economic stress, and impaired functioning. Women were primarily affected by adverse social environments and were resistant to the effect of financial stress, regardless of receptor gene type. The functioning of men was negatively affected by economic stress depending on the oxytocin receptor gene and a negative social environment. The results of the study suggest that gender plays a vital role in determining susceptibility or resistance to economic stress and poor social environments. There was also an effect related to oxytocin receptor gene type after experiencing a traumatic event. The study shows that gender plays a role in how environmental and biological factors result in mental health and behavioral outcomes.

Groups of people can be at risk for developing poor physical or psychological health based on social policies (e.g., social and economic policy, community-oriented health policy, medical policy, and public health care policy) and cultural norms (Aday, 1994). These components are primary factors in a framework for studying risk in populations. Additionally, Aday stated that social status (including race and ethnicity), the quality of relationships in the population (such as social support), and assets (such as skills and abilities) are part of resource availability. The author identifies a lack of these resources as part of the process of creating risk and creating populations that are vulnerable to stress. A focus on groups enables the identification of more extensive
social processes that contribute to stress, such as racism and oppression (Watts, 1992). Examining group experiences and experiences of racial minorities allows us to understand what stressors racial groups experience, how they cope with this stress, and how stress and coping outcomes appear.

There are a few critical areas for racial and ethnic minorities that affect their experience of PTSD (Pole, Gone, & Kulkarni, 2008). The authors described these populations in comparison to European Americans. The authors state that for American Indians there is a history of trauma and oppression and higher rates of trauma-related disorders. The authors describe differences in treatment preference, reporting that American Indians have a stronger preference for tribal traditional and alternative treatments, perhaps relating to a justifiable mistrust of Western institutions due to the history of the relationship between Indigenous and Western institutions. The authors also noted that American Indians could suffer from a lack of treatment resources and a lack of health care, which aggravate and perpetuate the effects of trauma.

Stress can also affect group dynamics. For the Diné people, key stressors have been government policy and the trauma of forced relocation. After the Long Walk and the following treaty signed with the US government, the Diné thought of themselves less like a group of individual clans and more as a single group of people.

Stress can manifest itself within groups through several pathways. Wilkinson and Kleinman (2016) talk about stress within groups through an essay on the relationship between those who suffer and those who inflict suffering. The specific example occurs through the story of Bartolomé de Las Casas, who witnessed the horrific traumas that Europeans inflicted upon the Indigenous people of the West Indies (Zinn, 1992, 2003).
De Las Casas (1875) documented and exposed these traumas and went on to work against the continuing brutality. The critical thought that Wilkinson and Kleinman offer is how individuals from different groups can work against institutionalized practices to promote understanding and work to end practices that are oppressive and traumatic.

**Stress and individuals.** While there are certain ways that groups regularly experience stress, there are also variables at the individual level that influence stress. Researchers have examined how individuals experience stress and have produced a growing body of evidence documenting its effect. Individuals interact with their environment, make up groups, and are diverse in ways that are germane to the current project on such characteristics as race/ethnicity and age. While these group factors play a role and can be present in the environment, individuals can react to the same stressor in different ways.

**Interindividual factors related to stress.** As previously mentioned, the perception of a stressor plays a role in how an individual experiences stress. Individuals differ in how they perceive stress, and this affects the stress process (Folkman & Lazarus, 1986). Although the perception or appraisal of stress can also be related to physical health and mental health influences (such as anxiety and depression), the perception of mastery (degree to which individuals feel they can rely on relationships to cope with stress; Hobfoll, Jackson, Hobfoll, Pierce, & Young, 2002), psychological and social resources (Lin & Ensel, 1989) including social support (Cohen & Wills, 1985) also influence appraisal of stress. Personality variables such as extraversion and neuroticism also play a role in the experience of stress (McCrae & Costa, 1986). The Indigenest Stress-Coping Model (Walters & Simoni, 2002) indicates that individual factors, such as
identity and enculturation in the Indigenous experience of stress, affect the perception and experience of stress.

**Stress and American Indians.** American Indians have historically and currently faced stress, and there is a growing body of literature documenting that experience. Although American Indians have faced stressors common to other racial and ethnic minorities in the U.S., the nature of the stressors and the magnitude of the stressors, as well as the underlying mechanisms, are often different. American Indians are a unique minority in the United States in that they have faced a history of colonization and experienced the subsequent trauma and loss. Colonization introduced a novel stressor: historical trauma. Cohen and Wills (1985) indicate that not only have stressors been added, but buffers (e.g., culture, ceremonies, languages), have been removed. This two-fold effect has significantly impacted American Indians as individuals, due to the removal of buffers and addition of stressors. With the removal of a buffer (such as culture), it can be challenging to reduce some stressors, such as racism (J. C. Quick, Nelson, Quick, & Orman 2001).

The history of American Indians is vital to review here very briefly. Looking at the past, we can situate some of the long-term processes that affect American Indian health both proximally and distally. When Europeans first contacted what would come to be called American Indians, there were over 5 million inhabitants, but this declined precipitously to a low of 250,000 around 1895 (Thornton, 1987). Thornton states that American Indians are still here and have increased in numbers, which speaks to their endurance. The population collapse was due to exposure to disease to which there was no immunity, war, genocide, forced removal and relocation, and the intentional and
systematic depletion of traditional sources of food (for example, hunting bison to near extermination).

The history of the Diné, or Navajo people, illustrates the trauma of colonization. The US Army subjected the Diné to the Long Walk (1864), the Religious Crimes Code (1883), the Navajo Livestock Reduction Act (1934), forced relocation (Walls & Whitbeck, 2012) including previously and more recently (1986), and boarding schools. Diné experienced these stressful events as a group (although some hid from the government and escaped the Long Walk to Bosque Redondo). Together the Diné people have remembered these events, elders have shared their stories, and the Diné have documented and preserved these stories (Chee, Yazzie, Benally, Etsitty, & Henderson, 1990). Of the nearly 9,000 Diné who were held captive, about 3,000 died. The Diné people endured four long years of hardship and suffering, but they were eventually able to return to their homeland.

Native Americans have faced an ongoing process of colonization with survival and resilience (Goodkind, Hess, Gorman, & Parker, 2012; Whitbeck, Adams, Hoyt, & Chen, 2004; Zinn, 1992, 2003). These powerful events were often traumatic and are still traumatic. The hegemonic colonial process of enslavement, rape, murder, warfare, displacement, starvation, physical and cultural genocide has created stress both historically and currently for American Indians (Evans-Campbell, 2008). "Specifically, over the last several hundred years, American Indian and Alaska Native (AI/AN) communities have endured historically situated traumas including massacres, boarding schools, forced removal, and prohibition of spiritual and cultural practices, as well as ongoing exploitation of bodies and lands" (Walters, Beltran, Evans-Campbell, & Simoni,
This historical but current and ongoing process of loss and trauma (Whitbeck, et al., 2004) has resulted in current health disparities.

There are broad areas of stress that American Indians experience. Johnson et al. (2008) identified several areas for mental health providers to consider when working with American Indians, including unemployment, poverty and low-income, violence and crime, health disparities, and substance use.

**Education.** A federal court in Arizona has recently recognized the role of intergenerational trauma in education with American Indians (Morales, 2018). The Havasupai sued the state of Arizona, claiming that the state did not provide adequate educational services or mental health services. Morales cited the detrimental effects of historical trauma, poverty, and boarding schools. Freeman and Fox (2005) state that although the educational attainment of American Indians has recently improved, there are still significant disparities; American Indians are less likely than their peers to receive a bachelor's degree (or higher).

**Employment.** Gone (2015) argued that providing American Indians with enough well-paying jobs could be more effective than providing therapy. Although there is evidence to support Gone's point (Castor et al., 2006; U.S. Department of Health and Human Services, 2001), the crux of his argument relates to the profound and pervasive effects of poverty on American Indian well-being. Unemployment rates on reservations can be extremely high; for example, 15.1% for American Indian and Alaska Natives, compared to 5.1% for all races (Freeman & Fox, 2005). This nearly threefold difference is noteworthy. Concerning the northwestern US in 2000, the unemployment rate in
Indian Health Service’s Billings Area Office (e.g., Montana and Wyoming) was 26.3% for males, and 1.67% for females (IHS, 2012) which is alarming.

**Poverty and Income.** Lack of economic security, the presence of poverty, and crushing unemployment rates are common features of American Indian reservations. The U.S. Department of Health and Human Services (2001) released the publication Mental Health: Culture, Race, and Ethnicity (A Supplement to Mental Health: A Report of the Surgeon General), and according to the report, Native Americans are the most impoverished ethnic minority within the United States. A quarter of the population lives in poverty, and the report connected lower socioeconomic status to poor physical and mental health.

**Health disparities.** According to Indian Health Service (2016) American Indians, on average, live 4.4 fewer years than the general population. A more comprehensive study conducted by Andersen, Belcourt, and Langwell in 2005 found that on average, American Indians have a 4.7-year shorter lifespan than the general population. This disparity is in part due to the have increased rates of death due to chronic liver disease and cirrhosis, diabetes mellitus, unintentional injuries, assault (homicide), suicide, septicemia, nephritis, influenza, and pneumonia. More alarmingly, American Indians living in Wyoming and Montana have an 8.6-year shorter lifespan than the general population (Andersen, Belcourt, & Langwell, 2005). These disparities, which were observed in data collected PRIOR to the COVID-19 pandemic, clearly deserve attention.

The U.S. Commission on Civil Rights (2003) reports health disparities exist due to socioeconomic disparities, lack of education, differences in culture, and a shortage of
health care in American Indian communities. Furthermore, the commission states, "A large and expanding gap exists between needed and available services, or unmet needs, in Native American communities" (p. 41) and that "the anorexic budget of IHS can only lead one to deduce that less value is placed on Indian health than that of other populations" (p. 49). While these words are somewhat disheartening, it does show institutional and government policy regarding health care has a direct effect on American Indians, and that these policies can perpetuate mental health disparities.

Bullock and Bell (2005) described the link between trauma and the development of health problems, including early death. The authors described the linkage within American Indians between experiencing trauma and increased likelihood of developing heart disease. Felitti and colleagues (1998) studied the effects of Adverse Childhood Experiences (ACEs) in the general population on their subsequent development of substance use problems, health conditions, and early death. The authors found that individuals who experienced more than four ACEs were more likely to develop substance use problems, chronic health conditions, and mental health problems.

There is also the alarming presence of suicide in American Indian communities, which research has connected to mental health challenges, including depression. Cohen (2008) argued that the connection between depression and suicide in American Indians is strong. Furthermore, the author stated that high suicide rates should be considered an indication of the high rates of depression. Native American and Alaska Natives have an 82% higher suicide rate than the general U.S. population (IHS, 2011). There have been suicide epidemics, with rural communities being devastated by the number of losses. At times, reservations have declared states of emergency due to the
number of suicides; the Navajo Nation in 2015 (Rickert, 2015) and the Oglala Lakota Nation in 2009 and 2015 (Bosman, 2015). Lester (1999) reported that Native American suicide rates are positively associated with acculturative stress, and found a negative association with traditional integration, which Chandler and Lalonde (1998) confirmed. This indicates that the process of both removing buffers and introducing stressors is related to suicide in this population, and that enculturation is a protective factor. However, there are deeply rooted social inequities that need to be addressed, such as environmental stressors (e.g., racism and impoverishment) resulting from the process of colonization.

**Historical trauma.** Black Elk (Lakota) spoke of his experience of Wounded Knee:

> I did not know then how much was ended. When I look back now from the high hill of my old age, I can still see the butchered women and children lying heaped and scattered all along the crooked gulch as plain as when I saw them with eyes still young. And I can see that something else died there in the bloody mud, and was buried in the blizzard. A people's dream died there. It was a beautiful dream. (Neihardt, 1988, p. 270)

Numerous researchers have written about historical trauma (Brave Heart, 1998, 1999, 2003; Brave Heart & DeBruyn, 1998; Brave Heart-Jordan, 1996; Braveheart-Jordan & Debruyn, 1995). Weaver and Brave Heart (1999) defined historical trauma as the "cumulative wounding across generations as well as during one's current lifespan" (p. 22). Historical trauma is much more than a single event or group of events. While the name suggests traumatic events that happened long ago, the "historical" part of the
term refers to the process of trauma beginning long ago; the traumatic events that result from this process are continuing and current (Whitbeck, Adams, Hoyt, & Chen, 2004). These traumas have been studied both in a distal and proximal capacity as they relate to the American Indian’s current experience.

Intergenerational trauma has both pervasive and focused effects. The "historical trauma response" is defined as composed of affective, cognitive, and behavioral aspects (Braveheart-Jordan 1996; Braveheart, 1998, 2003). This trauma response includes depression, self-destructive behavior, substance use, identification with the ancestral pain, fixation on trauma, somatic symptoms, anxiety, guilt, and chronic bereavement. Evans-Campbell (2008) puts forth the term “colonial trauma response” that describes the connection between the experience of current traumas and the traumas that American Indians have endured across the centuries. An example is when an American Indian might feel angry when forced to relocate due to a change in government policy when their ancestors went through a forced relocation (Walls & Whitbeck, 2012).

There is another phrase that has been used to define the trauma-related symptoms of American Indians, termed Postcolonial Stress Disorder (Ball, 1998). Ball conceives of this stress disorder as a sub-classification of PTSD and is a result of the colonization of Indian Country by the U.S. government. He noted it is somewhat ironic that this term is relatively new given that this disorder has been in existence for over 500 years. Perhaps this is because much of American Indian history has not been taught or is ignored, is misunderstood, and American Indian reactions to historical trauma are often invalidated (Brave Heart & DeBruyn, 1998; Brave Heart-Jordan, 1998).
American Indian researchers have also studied grief in tribal communities. Grant, Fretts, Croxton, Douglas, and Hopkins (2011) found that the experience of grief within a specific tribal community occurred in multiple domains, including individual, family, tribal, and place. However, they also found a process of resilience in these same domains. I describe this more fully in the Resilience section.

Researchers have shown that trauma affects various aspects of health. Barel, Van IJzendoorn, Sagi-Schwartz, and Bakermans-Kranenburg (2010) conducted a meta-analysis that looked at Holocaust survivors and their physical and psychological health. In comparison to those who did not experience the Holocaust (a control group) it was found that overall, survivors were less likely to be physically healthy, more likely to have symptoms of posttraumatic stress, more likely to have psychopathology, and more likely to have poorer cognitive functioning. However, there was no difference found in psychological health between survivors and the control group. They postulated that avoidance and adaptive coping could have explained this group difference. Additionally, for survivors who lived in Israel, there were no differences in psychological well-being; place of residence may be a protective factor. However, this could also mean they experienced a sense of belonging or that possible services were available to them.

O’Nell stated that people express distress in ways that are culturally bound. O’Nell (1996) writes about how historical events, sense of belonging, and "loneliness" are part of the experience of the Flathead People. Through this cultural lens, she expounds on the effect of history and historical trauma on individuals, and on relationships. O’Nell describes how loss prompts an adaptive behavior and the impetus to help others, and to be generous. She also conducts a cross-cultural examination of
how "depression" is experienced and expressed within this culture and people. As she comes to find, depression appears as a group of symptoms that are not based so heavily on psychological symptoms, but on symptoms that have more interpersonal features. The aspects of these symptoms are "not feeling cared for," "not caring for others," relationship difficulties with a significant other or family member, somatic symptoms, a spiritual crisis, suicidal ideation, and only one cognitive symptom – rumination.

It is important to acknowledge that the expression of trauma does not always lead to pathology (Denham 2008) and that the relationship between stressors and behavior is culturally bound. The relationships between stressors and coping behaviors are in large part defined by culture.

**Stress and older adults.** Health can be an essential factor of stress; chronic pain, chronic illness, and disease have been shown to be related to increases in stress. Stress has also been shown to build as chronic health conditions increase over an individual's lifetime. Russell and Cutrona (1991) studied social support, stress, and depressive symptoms among the elderly and found that a lack of social support increased daily stressful events, which aggravated symptoms of depression. Their findings support the idea that social support buffers symptoms of depression both directly and indirectly. In a related study of social support and stress in older adults, Norris and Murrell (1990) examined this in the context of bereavement due to the loss of a spouse. They discussed symptoms of depression as they related to the death, adverse life events, and the presence or lack of resources. The first result is not surprising; participants who experienced depression after a loss were shown to have an
increased likelihood of having depression before the loss. However, the authors found that these same individuals were likely to be more affected by the results of coping associated with both positive and negative life events. The study shows that those who have lost a significant source of social support such as a spouse, who have higher levels of stress, and a lack of resources, may be at risk for developing depression.

**Stress and coping.** There exists a relationship between stress and coping, such that the interaction between the two can either increase or decrease the other, depending on how the stress affects the individual or group, and how the individual or group copes. Ineffective or maladaptive coping does not reduce stress and can serve to exacerbate and perpetuate stress in a self-sustaining feedback loop that can lead to physical and mental health problems. Effective or adaptive coping can reduce stressors and is a protective factor concerning physical and mental health.

**Coping**

*History, Models, Concepts, and definitions*

“From a process standpoint, coping is defined as ongoing cognitive and behavioral efforts to manage specific external and internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus, 1993, p. 237).

Lazarus and Folkman (1987) described the three main components of their metatheory of stress, coping, and emotion. First, they relate that there is a relationship among them, such that there is an interaction between individual and environment, and that the relationship between these two must be considered to understand the dynamics of stress. Secondly, they suggest that this transaction or relationship is process oriented and that it is not enough to study stress, coping, and emotions in isolation or without
context, including across time and different situations. Finally, they indicate that emotion is a complex system that is more than a simple bi-directional relationship between stimuli and response. They propose that emotions are a part of a complex system that includes causal antecedents, mediating processes, immediate effects, and long-term effects. However, they also note that the model is not linear but recursive.

Pearlin and Schooler (1978) defined coping as a protective behavior that buffers the adverse effects of an individual's social environment. This protective mechanism is defined to work in three specific ways, including changing environmental causes of stress, changing the perception of one's stress (reframing), and managing the emotional effect of the stress. They found that among men, the more highly educated, and the more financially affluent used more efficacious coping behaviors. These characteristics beg the question: how do these findings relate to the coping behaviors of those who might not possess resources such as higher education or higher SES? More specifically, how do these findings relate to marginalized groups like American Indians? Another significant question concerns that of cause and effect; to what degree do these positive coping mechanisms result from having access to resources that may not be as easily accessible to American Indians?

Folkman and Lazarus have extensively studied coping. In 1980 the authors examined two separate approaches to coping with stress: problem-focused coping and emotion-focused coping. The authors found that problem-focused coping was employed more frequently when situations motivated participants toward completing a task, or when more information was required. Participants used emotion-focused coping when they could not change situations. Lazarus and Folkman (1984) developed the
transactional stress model, which is the appraisal of external events that are potentially harmful to an individual. The individual appraises the potential harm or benefit of the event and then appraises their own ability to cope with the stress. Endler and Parker (1990) evaluated coping measurement and critiqued weaknesses of contemporary coping inventories. The authors proposed an inventory based on task, emotion, and avoidance.

Folkman and Lazarus (1986) studied differences between depressed and non-depressed participants in a study that examined appraisal, coping, and emotional responses to stress. The authors found a connection between appraisal and coping, identifying that how participants viewed the stressor was connected to their coping response. Participants who were lower in depressive symptoms appraised their stress more positively, coped with their stress using more adaptive coping strategies, and had fewer negative emotions as the result of the stress. Interestingly, the authors noted that participants higher in depressive symptoms might have more accurately appraised their stressors, which could validate their behavioral and emotional responses and explain their symptoms. This interesting phenomenon is related to what Adelson (2005) describes as "depressive realism" or the idea that sometimes people who are depressed make more accurate judgments than those who are not depressed. Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen (1986) examined the relationships between the variables of stress, appraisal, coping, emotional responses, and outcomes and found they were interactive and bidirectional. However, Folkman et al. (1986) state that an examination of more long-term outcomes involving stress and
coping could give a more developed and accurate picture of the stress and coping process.

Carver and Scheier (1994) relate two aspects of coping that are useful to examine. They define situational coping and coping dispositions. The authors defined situational coping as the specific coping behaviors that are used within particular contexts and may not relate very well to an individual's general coping style. Additionally, they defined coping disposition as a tendency for individuals to use specific coping behaviors across situations and over time frequently.

Forsythe and Compas (1987) examined stress, appraisal, and coping with significant life events and smaller daily stressors. The authors examined how study participants appraised events, the degree to which participants could control these events, the use of problem-focused and emotion-focused coping, and symptomology. The authors found that the better the match between the appraisal and actual degree of control and corresponding use of coping, participants were likely to have less symptomology. Such a fit could be using more emotion-based coping when the participant was unable to change the stressor.

**Facets of Coping**

**Coping and environment.** It is essential to examine how coping behaviors interact with the environment. J. C. Quick, Nelson, Quick, and Orman (2001) explain how the aspects of person and environment interact to create stress spirals, which are processes of increasing or decreasing stress through the person-environment interaction. Individual characteristics that exist with corresponding environmental features can work together to either increase or reduce stress, such as the interaction
between anxiety and an ambiguous environment where the individual does not have much control over events.

Pearlin, Menaghan, Lieberman, and Mullan (1981) studied the process of stress, coping, social support, and depression. The authors found that the effects of social support and coping did not affect depression directly; they helped to decrease depressive symptoms by reducing the effects of the stress itself.

**Coping and groups.** Cheng, Lau, and Chan (2014) conducted a meta-analysis that examined coping flexibility as it related to a broad number of factors. The authors found that more coping flexibility was associated with psychological adjustment, SES, age, and social orientation (degree of individuality). There was a positive association found between coping flexibility and psychological adjustment, a link which was found to be stronger in individuals from lower SES; this perhaps suggests that a lower SES creates an impetus for coping flexibility, as some coping mechanisms may be unavailable or ineffective (cf Pearlin & Schooler, 1978). It is interesting to note that in countries that had lower levels of individualism, there was a stronger positive association between coping flexibility and adjustment. The same was true for countries with higher average ages, suggesting that level of individualism and age play a role in the relationship between coping and adjustment.

Differences in coping are evident between groups that contrast in individualism and collectivism (Eitle & Eitle, 2014). This difference is particularly apparent in how the coping is accomplished – in the degree relationships with others is used. With individualistic coping, individuals who are experiencing stress rely more on their resources to cope with a problem. With more collective or group-oriented coping,
relationship with others is used to access resources and reduce the stress. These approaches have their advantages and disadvantages (See the previously mentioned research of Kirby, 2008).

**Gender differences.** Folkman and Lazarus (1980) found gender differences when examining problem-focused coping and emotion-focused coping, but only with problem-focused coping. Men were found to use problem-focused coping with tasks that had to be completed and in situations that required more information.

People accomplish goals differently when using direct coping and indirect coping. Direct coping works by reducing a stressful experience by changing what is causing the stress itself. Indirect coping is changing the environment or context in which the stress occurs, so the stress is reduced or no longer occurs. Direct and indirect coping do not differ in effectiveness, but Hobfoll (1998) has associated these approaches with aspects of gender and culture. According to the author, in some contexts women in American culture use indirect coping because they cannot directly cope, or their power to cope directly has been reduced by the lack of power they hold, due to men taking that power. An example Hobfoll cites is a wife who is not able to buy a car because her husband oversees large purchases. The wife gets the car she wants by subtly influencing her husband and placing cues in the environment to pique his interest. Direct action in this instance would be to tell the husband to buy the car she wants, or to buy the car herself.

Hobfoll and colleagues (1988, 1998, 2002) have written about individual, gender, and cultural differences in the experience of stress, as well as differences in coping behaviors. Hobfoll, Dunahoo, Ben-Porath, and Monnier (1994) studied gender and coping and developed a model based on their findings which related the social aspects
of coping. They found gender was related to differences in a) antisocial/prosocial coping and b) passive/active coping. The authors also looked at how coping strategies were related to emotional distress. They found that active coping was associated with lower emotional distress regardless of gender and that both men and women used active coping to the same degree. However, the authors did find some differences in coping based on gender within the dimension of prosocial/antisocial coping. Women were more likely to use prosocial coping; men were more likely to use antisocial or aggressive coping. It is interesting to note that the authors found that for men, both antisocial coping and prosocial coping were related to greater distress. These results indicated that women were more likely to use an active prosocial coping style, and experience more emotional benefit from doing so. Also, Communal mastery was more strongly associated with active-prosocial coping on the Strategic Approach to Coping Scale. Antisocial coping was associated with “greater anger, greater depression, and lower levels of social support” (Hobfoll, 1998, p 154).

As far as more individualistic coping versus more collectivistic coping, Hobfoll (2002) states that there are pros and cons for each, within the process of coping and within outcomes. Billings and Moos (1981) also reveal that social support can be a buffer, but also a stressor. More individualistic coping can be more direct with less consideration for how the coping will affect relationships or others, with the potential to be asocial and even aggressive. Individuals can pursue goals at the cost of relationships and group benefit. However, this depends on the individual’s ability to act directly; Hobfoll (1998) states that this ability is not equal across gender or aspects of identity and diversity. However, more direct action in all cultures would not be
appropriate, for in some cultures more direct action in certain situations could be considered inappropriate, risky, or rude.

**Coping and individuals.** Carver (1998) states that self-efficacy can increase self-confidence, in the light of an individual feeling more confident after having made it through a difficult time and comparing a current circumstance to the previous difficulty. In a 1986 study by McCrae and Costa, the authors found that individuals who used more effective coping mechanisms felt more positively and were more satisfied with their lives. There was also the influence of the individual’s personality, such as neuroticism associated with less effective coping. The authors also found that stronger interpersonal relationships and a social support network were associated with better psychological well-being.

Style of coping can depend on the availability of resources that are used to cope, including personal resources such as health or resources such as social support. Holahan and Moos (1987) studied active coping and avoidant coping in a sample of nondepressed and depressed participants. The authors found that active coping strategies were more highly associated with positive life events, and that avoidant coping was more strongly associated with adverse life events. The authors also found that active coping was stronger with those participants who had a higher amount of personal or environmental resources, regardless of mental health status. This link between coping and resources suggests that avoidant coping may not necessarily result in depression, but it could be the result of an inability to actively cope due to a lack of resources. In the context of social support, daily stress, self-esteem, higher levels of
social support and self-esteem were seen to be protective against the somatic and psychological symptoms of stress (DeLongis, Folkman, & Lazarus, 1988).

Olff (1999) describes the effect of stress on the immune system, stating that chronic stress can reduce immune functioning and result in depression. However, Olff reports that psychosocial interventions including skills/coping training and receiving social support can improve physical health in people who are suffering from chronic health conditions.

**Coping and American Indians.** Native Americans are diverse and have diverse cultures and histories. These factors play a role in the appearance of coping behaviors. However, Native Americans tend to be collectivistic (Aragon, 2006). Social support enables resilience in Native Americans and has provided access to resources and emotional support during times of stress. Hobfoll (1998) believed that stress can spread through relationships via empathy and that collectivist cultures are more susceptible to such contagion (cf. Kirby, 2008).

While it is informative and useful to examine the negative thoughts, feelings, and behaviors associated with stressors, it is also useful to investigate how American Indians have displayed resilience. Yellow Horse Braveheart (2003) identified a “historical trauma response” including self-destructive behavior, suicidal gestures, and substance use. Denham (2008) acknowledged these behaviors, but noted that individuals can also respond with resilience, which has been described as “historical resilience” (Belcourt-Dittloff, 2006; Grant et al., 2011). Historical resilience is a term that is now used by researchers within American Indian studies. In a similar vein, previous
research has defined the idea of growth related to traumatic events as “posttraumatic growth” (Tedeschi & Calhoun, 1996).

Mellor (2004) has qualitatively studied Indigenous reactions to racism and interviewed Aboriginal Australians. The author asked about coping with racism and categorized their responses. The purpose of the response defined the categories: to defend the self, to control or contain the reaction, or to confront the racism. The author found the purpose of the response provided a better method of categorizing similar stress-coping behaviors.

Corbine (2011) studied coping differences between American Indians and White Americans. The author found that there were no differences in coping regarding race but found differences when examining race and gender. The author found that American Indian men preferred more emotion-focused coping in comparison to Whites, who preferred task-oriented and problem-focused styles. There were also differences found with females, with American Indian females preferring more problem-focused and task-oriented coping styles than White women.

There are also ways in which Tribes and communities of Native Americans gather together to support each other. Emotional support often takes place during times of loss, such as a death, dance, celebration, or ceremony. There are also annual events where people gather to commemorate historical events, such as the Massacre at Wounded Knee; it is an annual event that provides an opportunity to create a space for both remembering and healing.

**Coping and older adults.** Older adults face a few critical aspects that affect stress and coping that are unique. Examples include lifespan development, physical
and mental health concerns, and the loss of loved ones. Lazarus and DeLongis (1983) gave an overview of stress and coping research in aging and made a few critical observations. They stated that, at the time, research should examine stress and coping longitudinally to get an accurate picture of how these two interact across time and individual lifespan. They also recommended consideration of positive and negative experiences, changes in health and perception of health, as well as how older adults may tolerate and accept changes in health in comparison to younger adults. The authors also discussed coping and argued that it is vital to consider situational coping and appraisal of stress as essential contributors to coping. They also stated a few other important aspects that influenced stress and coping in aging, including meaning-making of stressful events and coping outcomes, commitment to personal ideals that influence coping patterns, and finally beliefs about the self and the world such as control and influence. The authors help to define some essential aspects of aging and coping which should be kept in mind.

Frazier, Newman, and Jaccard (2007) examined how older adults achieved best life outcomes (such as psychological well-being), based on a complex model that included coping and control strategies in the context of personal development. The authors found that adults can make adaptive adjustments in the face of adversity and still work toward positive outcomes. In consideration of the health disparities that older American Indian adults face and related symptoms of depression and anxiety, Manson and Brenneman (1995) tested an intervention designed to improve resilience. Based on their findings, the authors recommended offering American Indian older adults who face
chronic health conditions courses on effective coping with stress and depression to improve their resilience.

**Coping and resilience.** Coping can take many forms and have many outcomes; however, adaptive and effective coping are what contribute to resilience.

**Resilience**

**History, models, concepts, and definitions**

Masten (2001) states that despite challenging circumstances, common features of human development can support positive outcomes. Masten states that three key areas affect this process, including pre-existing components, threats to well-being, and buffering factors. According to Masten, it is when these components are either high (such as threats to well-being) or low (such as buffering elements) that the process of resilience is in danger. "Resilience is defined as a broad systems construct, referring to the capacity of dynamic systems to withstand or recover from significant disturbances" (Maston, 2007, p. 921). Yehuda and LeDoux (2007) state that specific factors contribute to the development of PTSD, and protective factors as well. The authors argue that exposure to trauma may even act as a protective factor, with consideration given to individual differences as well as the timing of the events, resulting in the effect of preparing or inoculating a person against future trauma exposure.

Bonanno (2004) defines recovery as when an individual's mental health is diminished, perhaps to sub-clinical or a clinically relevant level and then recovers to the level preceding the diminishment. The author then argues that resilience "reflects the ability to maintain a stable equilibrium. In the developmental literature, resilience is
typically discussed in terms of protective factors that foster the development of positive outcomes and healthy personality characteristics" (Bonanno, 2004, p. 20).

Carver (1998) discusses resilience and thriving. He identified multiple pathways of differing levels of health as stress process outcomes. The author describes "succumbing" as a state where the reduction in well-being is maintained over time, resulting in a long-term decrease in health or mental health, without any positive gains made. He identified a second pathway as "survival with impairment" or an initial decrease in functioning or health, and then an increase in functioning but not a return to baseline – the functioning remains below baseline, but above succumbing. Carver identified a third pathway that an individual's health as "resilience" or recovery – a return to baseline functioning after the decrease in health. He defined a final, fourth path - "thriving" or an initial decrease in functioning and then an increase to the level of recovery and beyond, with a subsequent level of functioning that is greater than before the decline in health. In summary, Carver proposes various ways an individual can respond to stress.

Carver also describes potential mechanisms that explain why an individual would regain their health: the development of immunity or resistance, faster recovery from the harmful effects of stressors, or the subsequent development of increased functioning. Carver describes potential factors that could moderate these mechanisms including self-efficacy, a positive outlook, positive and supportive relationships, and appropriate and adaptive coping mechanisms.

Briefly returning to Carver's ideas about mastery, Carver (1998) suggests that because there are two separate kinds of trajectories that either maintain illness
(succumbing) or support health (survival with impairment, resilience/recovery, and thriving) the processes that enable mastery both either maintain illness or enhance health. Carver states that there is a cycle of continued reduction in mastery that begins with a pre-existing lower level of mastery. The cycle continues with avoidance of the stressor, which ineffectively reduces it. The process continues and leads to a further decrease in mastery. The trajectory of increasing mastery is the opposite; with effective and adaptive coping leading to further self-confidence and further increased mastery. Carver defines this increase in mastery as supporting changes in coping, social support and being directly related to surviving, being resilient, and thriving.

**Facets of resilience**

**Resilience and the environment/Resilience and social support.** Stress can provide the impetus for individuals to change and improve their relationships, to build support. Carver (1988) talks about the strengthening of social support that can occur during a stressful time. This process enables resilience and occurs through the ability of relationships to be changed and improved. Poulin, Brown, Dillard, and Smith (2013) substantiate this process in their research and report that giving to others during periods of stress helps keep people alive. This finding may speak to the power of relationship, or perhaps that those who offer help are more likely to receive help. Rodrigues, Saslow, Garcia, John, and Keltner (2009) describe the connection of the release of the hormone oxytocin during stress, and that this hormone is responsible for increasing empathy, and is also related to a more relaxed physiological stress response. Billings and Moos (1981) stated that social support could both be a source of coping and a cause of
stress, and that coping can affect social support, either reducing or enhancing the support.

**Resilience and groups.** Hobfoll (2002) argues that the focus on individual characteristics that contribute to resilience is a deficient perspective. He states that this focus within Western research is due to the cultural bias of individualism and that a complete model recognizes the contributions that social relationships and social resources play. He contrasts these aspects of mastery, or the individually or socially oriented coping that is used to solve problems. He described the more socially oriented approach as communal mastery, which is defined by a stronger reliance on social support, relationships, more prosocial coping, and a leadership style that is more indirect, such as leading by example.

**Resilience and individuals.** Tedeschi and Calhoun (1996) created the Posttraumatic Growth Inventory (PTGI) to assess self-reports of positive after-effects of trauma. The authors developed a scale and measured positive outcomes across several domains, with each domain composed of different areas of growth. The first included changes to self-perception. Individuals experienced a sense of gaining more knowledge or ability after having made it through a challenging or traumatic event. Another domain was a change in the way that individuals related to themselves and others. The authors described this change in individuals who experienced posttraumatic growth as an increased appreciation for the lives and relationships of others. They also valued their selves more and were consequently able to empower themselves and express their feelings more openly. Another domain that was measured included an increase in empathy for the pain and suffering of others, and a willingness to support
others. Another domain was the resulting changes in perspectives about life itself. Individuals who experienced posttraumatic growth were able to appreciate life as a gift, attempted to take full advantage of daily life, perhaps found strength in religion or spirituality, and developed adaptive and healthy perceptions about their experiences.

Tedeschi and Calhoun (1996) did note some gender differences in how PTGI scores appeared. Women perceived more changes in their social relationships and more changes in their sense of spirituality. The authors suggested women might rely on social relationships and spirituality for adaptive coping mechanisms more so than men. Another difference they noted (although not as pronounced as the differences in relationship and spirituality) was that women who experienced posttraumatic growth felt more empowered. The authors suggested women can make significant gains in this domain in comparison to men due to experiences of marginalization.

Regarding differences in susceptibility to stress and benefit from resilience factors, Belsky and Pluess (2009) found something interesting. The authors found that just as individuals differ in susceptibility to stress related to the environment, individuals also differ in their ability to benefit from variables (such as genetic and environmental factors) that may enable resilience.

Resilience and American Indians. The concept of resilience is well known to American Indians. While there are many differences among the cultures of American Indians, there are common themes, such as resilience as part of human character, and that a source of resilience is also all around us (in nature).

Considering the diversity of American Indians, it would be beneficial to discuss ideas of resilience as conceptualized by several tribes. HeavyRunner and Marshall
(2003) studied the persistence and resilience of Blackfeet college students. They asked elders who spoke the language about how they would describe resilience. Floyd Heavy Runner and Stuart Bear Shield (Blackfeet) used the term *pi saats si kaa moo taan* (p. 15) or “miracle survivors” to describe the relatives who had been severely ill but had recovered. They related this ability to students who had bounced back – to carry on despite hard times. It is interesting to note that this term fits an identity as opposed to a characteristic or action. This takes endurance and persistence which is reflected in the act of asking for help by offering tobacco. Floyd Heavy Runner said, “When you offer your tobacco . . . turning back is not an option . . . there is no giving up” (HeavyRunner & Marshall, 2003, p. 17).

There are also other conceptions of resilience and a few terms that relate resilience to strength. Leila Picotte (Ho-Chunk) used the phrase *wa nah igh mash jah* – or “strong mind” (HeavyRunner & Marshall, 2003, p. 15) to describe the idea of resilience. According to Sherry Red Owl (Lakota) this is *wacan tognaka*, or “strong will” (HeavyRunner & Marshall, 2003, p. 15). Pat Pierre (Salish, Salish Language Institute) used the phrase *nyawyols* – "root is strong." This definition denotes a characteristic that gives a visual of a nature-based connection and speaks to the strength of one’s connection or relationship to a source that provides strength, establishing the capacity for resilience. Heavyrunner and Marshall give a description that reflects the thoughts of Masten (2001) along with identity development, self-awareness, and spirituality.

James Clairmount (Lakota) used the phrase “resisting bad thoughts and resisting bad behaviors” (James Clairmount, as cited in Graham, 2001, p. 1.) to describe resilience. He described a proactive and preventative approach to resilience: avoiding
thoughts and behaviors that might be risky or problematic. He offered these thoughts that related resilience to resistance, acceptance, and learning:

The closest translation of ‘resilience’ is a sacred word that means ‘resistance’ . . . resisting bad thoughts, bad behaviors. We accept what life gives us, good and bad, as gifts from the Creator. We try to get through hard times, stressful times, with a good heart. The gift [of adversity] is the lesson we learn from overcoming it. (James Clairmount, as cited in Graham, 2001, p. 1.)

The Diné concept of Hózhó relates that all individuals are inherently healthy and resilient, and any disorder comes from an individual’s lack of balance with the environment. Hózhó is beauty that emerges with harmony, respect, and spirituality. Wellness comes from the universe, all its living beings, and includes time. Furthermore, this necessitates that individuals (including their thoughts, behaviors, and speech) reflect the natural order and beauty that is around them. Hózhó requires adaptation and flexibility but also resistance to imbalance, sickness, and malevolent forces.

Resilience is defined by HeavyRunner and Marshall:

We like to think about resilience in a positive, proactive way. Resilience is the natural human capacity to navigate life well. It is something every human being has – wisdom, common sense. It means coming to know how you think, who you are spiritually, where you come from, and where you are going. The key is learning how to utilize innate resilience, which is the birthright of every human being. It involves understanding our inner spirit and finding a sense of direction. (2003, p. 15)
Native Americans have displayed resilience in the face of ongoing trauma (Campbell & Evans-Campbell, 2011), have persevered, and have a story of hope (Thornton, 1987). An important question is how is resilience thought of by these Indigenous people.

When you come from a holistic background, it’s hard to draw a knife and surgically carve out a piece and say this is specifically resilience; this is not resilience from the standpoint that we don’t think of things in that manner. (Grandbois & Sanders, 2009, p. 572)

Oré, Teufel-Shone, and Chico-Jarillo (2016) identified a shift in resilience research. The authors describe the shift from a focus on individual traits to resilience as a much broader concept that reflects a more systemic and dynamic orientation. This dynamic includes the contributions of social groups and the understanding that system components are interconnected. This concept relates to the ecological model of Bronfenbrenner (1979) and the dynamic biopsychosocial model of health developed by Lehman, David, and Gruber (2017).

American Indian and Alaska Native resilience has been studied with a content analysis, looking at resilience across the lifespan. Authors (Oré, Teufel-Shone, and Chico-Jarillo, 2016) state that the benefit of using such a method would help inform health policy to support resilience among American Indian and Alaska Natives. The authors examined eight peer-reviewed articles that spanned from 1970 to 2015 in the meta-analysis. They defined resilience at the individual, community, and cultural level. Three main themes emerged. First, American Indian/Alaska Native resilience is an ongoing and changing process. Second, the authors found resilience in
intergenerational relationships and the responsibilities those relationships and roles carried. Third, the authors found cultural traditions and understanding actuated resilience. The authors state studying resilience in this way can help inform health treatment practices and promote health policies that will enable people to remain healthy and endure events that are potential risk factors.

So to sit and say, you know, looking at the resilience of people, and all the things that they have undergone during that time period . . . yet they retained their culture, they retained their identity . . . this [is] resilience. (Grandbois & Sanders, 2009, p. 572)

This statement could reflect what Grandbois and Sanders (2009) asserted when they discussed the “legacy of survival” (p. 572). Resilience is passed on from previous generations to future generations. Regarding this legacy of survival provided by American Indian ancestors, Elwood (2016) wrote about a dance, the “Duck and Dive.” According to Nez Perce elder James Spencer, the dance commemorates the Battle at Big Hole Montana. He stated:

All of these stories need to be told and the young made to listen. How else can we learn about our people’s power and ability to adapt and overcome challenges? We face many challenges today, and sometimes we think they are impossible to overcome. But we owe it to our ancestors to find a way to overcome any challenge we may face. Because everything they did, they did for us. Their suffering, their sacrifice; was for the future generations to come. (Elwood, 2016, para. 13)
In 2009, Grandbois and Sanders wrote an article that focused on identifying resilience factors for eight American Indian elders. The qualitative study found several categories of resilience, including resilience provided by traditional American Indian culture, social support, a unity with the natural world, and the gift of life given through ancestors.

Grandbois and Sanders (2012) examined sources of resilience in Native American elders. They found education and employment as a source of resilience. Hastinn Ch’il Haajjin (Chief Manuelito of the Navajo) said, “My grandchild, education is the ladder. Tell our people to take it” (Diné College, n.d.).

Jackson and Chapleski (2000) studied resilience in a cohort of American Indian elders. Their sample included elders who lived during the era of the Religious Crimes Code (1879 – 1933) and Boarding Schools (1869 -1960s). For these participants, engaging in traditional cultural activities was punishable by law, and the US government suppressed tribal traditional spiritual practices. The authors found resilience was the ability to retain one’s culture while being able to navigate living in the majority culture. This ability to live in two worlds involved being able to moderate the expression of their culture, and at times to be able to practice non-Native culture.

Griffith (2005) examined the stress and coping among Northern Plains American Indian college students. They found that participants who endorsed a strong bicultural identity – both White and American Indian – did not have lower levels of stress and they used traditional coping strategies more frequently than their peers.

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2 Chief Manuelito was describing climbing down a ladder from a high mesa towards a grassy canyon where there were resources (Niethammer, 2001).
Resilience in Indigenous people can differ based on age and generation. Wexler (2014) studied resilience in Alaska Natives within three generations. The author found that while there were similar components that enabled resilience such as engaging in cultural practices, there were differences in what provided each generation with stress and resilience. The elders benefitted most from grounding themselves in traditional culture, and this is what provided them with the strength to endure hard times. The adults had a strategy of standing up and fighting against racism and historical trauma. The youth made it through difficult times by making the best of what they had. However, youth needed help engaging in cultural practices because of deculturation. On a similar note, the findings of Walls and Whitbeck (2011) imply that resilience lies in breaking the cyclical effects of historical adverse events that result in cultural losses by reconnecting generations and educating parents and children about cultural values, spirituality, and practices.

Zimmerman, Ramirez-Valles, Washienko, Walter, and Dyer (1996) found that for Native American youth, a connection to their culture provided increased self-esteem and was a protective factor through the process of decreasing stressors and increasing buffers. They also found youth who participated in their cultural activities enhanced their self-esteem and promoted their sense of community.

Denham (2008) described a resilient response to historical trauma. The author described using historical trauma to enable the sharing of strategies that provide resilience. He also described the relation of family and group identity as a framework to contextualize stories, and as the context through which to create narratives of strength and to provide meaning and purpose. Ramirez and Hammack (2014) describe the
resilience of a non-federally recognized tribe of California Indians. The authors interviewed two tribal leaders who had a high level of community engagement and dedication. The authors found that relationships, identity, commitment to the wellness of their tribe, and spiritual practices were sources of resilience for the participants.

Vizenor (1999) coined the term 'survivance' and defined it as the "active sense of presence, the continuance of native stories, not a mere reaction, or a survivable name. Native survivance stories are renunciations of dominance, tragedy and victimry" (p. 1). Being able to heal from the effects of trauma and to be able to remain in an active and empowered role in how one views struggle and conflict. Charbonneau-Dahlen (2010) studied the effects of the boarding school experience on a sample of Native American participants and found that participants experienced significant traumas and had long-term physical health and mental health problems that they were working to overcome. However, the author identified aspects of resilience such as traditional spirituality and telling their story of trauma and survival (see also Denham, 2008; Gone, 2013). Long and Nelson (2008) acknowledged the roles of ethnic and cultural identity, culture, religion, and spirituality as aspects that contribute to resilience (and developed a scale to measure resilience based on these aspects).

Penehira, Green, Smith, and Aspin (2014) state that focusing on resilience in Indigenous populations promotes the idea that resilience by itself is the key to Indigenous well-being, which is only part of a bigger picture. The authors argue that it is better to compliment the idea of resilience with resistance, which is the process of fighting against power imbalances that negatively affect Indigenous lives. By incorporating the concept of resistance, the authors remind us that it can be unfair to
focus solely on "bouncing back." Examining the reasons why "bouncing back" needs to occur in the first place can ease the need for resilience by eradicating social, political, and economic disparities. Concerning health disparities, a step in the right direction would be respect for traditional culture and the acknowledgment of rights to traditional territories ("Where are we now," 2009).

Blackcloud (as cited in Braveheart, 2010) spoke of the devastation of historical trauma, starting with the death of their great leader Sitting Bull.

We have suffered remembering our great Chief and have given away much of what was ours…. During this time the heartbeat of our people has been weak, and our lifestyle has deteriorated to a devastating degree. Our people now suffer from the highest rates of unemployment, poverty, alcoholism, and suicide in the country…. Let a hundred drums gather. It must be a time of celebration, of living, of rebuilding, and of moving on. Our warriors will sing a new song, a song of a new beginning, a song of victory. (p. 302)

Resilience and older adults. Wagnild (2003) examined resilience in older adults who live in rural areas. The author identified particular risk factors this population faces, focusing on how income affects resilience. Wagnild found that low income could contribute to the development of health problems such as declining physical health and limited access to health care. Lower socioeconomic status was related to lower levels of resilience, associated with the development of poor health, and connected with participants' reduced ability to complete activities of daily living. A similar study by Wells (2009) offers some conflicting information, with income not being associated with
resilience; however, the author found physical and mental health were positively correlated with resilience.

In other relevant work, Roh et al. (2015) recently found that in the context of adverse childhood experiences, social support, living with others, and a positive perception of physical health were factors that protected against depression within this population. Similarly, Schure, Odden, and Goins (2013) found that resilience was related to lower levels of depression and chronic pain, and higher levels of mental and physical health, although the authors did not examine social support.

**Existing Literature Review Summary Statement**

As made clear in the preceding paragraphs of this second section of the manuscript, the analysis of stress, coping, and resilience has a long history in psychological and related sciences. Several conceptions of stress, coping, and transactional analyses of stress and environment exist. Many of these conceptions have direct and/or indirect implications for wellness among American Indian populations. In addition, increasing attention has been allocated toward understanding resilience in general and in specific relation to American Indian and other Natives’ experiences and specific tribes’ worldviews. In the next section, I will describe a qualitative analysis of the scientific and scholarly products of American Indian scientists who composed the members of Dr. Gyda Swaney’s InPsych research group. This narrative review will provide further insights into Native American resilience, wellness, and health.
Part 3: Narrative Review

Chapter 1: Formulating the Problem

Problem Statement

American Indians are a unique population that has been historically understudied. However, psychological research with this population is developing and researchers are beginning to explore facets of American Indian mental health. The InPsych Program and InPsych lab were directed by Dr. Gyda Swaney for approximately 18 years. There is a need to better understand resilience in American Indians, and more specifically, there is a need to better understand what the resilience-based research of the InPsych lab found during this time.

Central Question

There is a movement for American Indians themselves to conduct the research and to begin to develop culturally adaptive and Indigenous frameworks of research. There have been many Native psychologists who have helped push this work forward. Dr. Gyda Swaney (Salish) was one such Native psychologist who directed and guided qualitative and quantitative research with American Indians through the InPsych Program in the Psychology Department at the University of Montana. An important question exists: During Dr. Swaney’s time of mentoring student researchers, what has the InPsych lab learned about resilience?

Purpose of the Study

This narrative review will examine previous research to inform future research. Potential benefits include informing policy and practice. The review will explore resilience research of the InPsych Lab, evaluate overall findings, identify gaps, and
highlight strengths/weaknesses. In addition, this review will provide recommendations for future lab direction.

This chapter focuses on the resilience-based research conducted through the InPsych Program and InPsych research lab. The body of research conducted by the InPsych research lab will be reviewed and analyzed, consisting of a narrative review. This chapter will identify conclusions and relations among studies and any inconsistencies or gaps and explore the reasons for these. These will be considered in the context of research beyond the lab. Second, I will develop and evaluate a new theory and/or evaluate an existing theory or theories to explain how and why individual studies fit together; third, it will provide implications for practice and policy; and finally, it will outline important directions for future research (e.g., highlighting where evidence is lacking or of poor quality).

**Significance of the Study**

This study will provide an overview of the previous resilience-based research conducted in the InPsych research lab. It will provide insight into research constructs as they appear with American Indians. It may also help guide future research projects and should help elucidate Dr. Swaney's efforts to guide and conduct research with American Indians.

**Organization**

This section will be organized into a brief introduction section, which introduces the narrative review, relates its importance, and offers how it may contribute to the existing body of research. Next, a short literature review will present some relevant context for the specific reviewed research projects. The methods section will describe in
detail how the corpus for the narrative review was chosen. A results section reports the analysis of the studies and significant findings. A concluding discussion section describes connections between the studies, evaluates the quality of the research projects, identifies gaps in the research, and makes recommendations for specific areas, methods, and ethical considerations for future research.

**Chapter 2: Literature Review**

The preceding comprehensive literature review provides a detailed context about resilience in American Indians. The research conducted by the students with the guidance of Dr. Swaney can be situated within this research, although there are a few important pieces of information to relate. These include how the resilience-based research projects began (Resilience in Native American Older Adults: Two Studies, 2006) and the collaboration with Dr. Kimberly Wallace. Before a collaboration between Drs. Wallace and Swaney began, Dr. Wallace was already interested in resilience in American Indian older adults. Dr. Wallace, a colleague on faculty with Dr. Swaney connected for a number of reasons, including Dr. Swaney’s connection to the American Indian community and her ability to provide cultural consultation, as necessary. The project began with qualitative interviews gathered in 2004, which examined stressors and coping strategies of American Indian older adults. This work identified stressors and coping mechanisms and provided information about the appearance of kinds of coping techniques that participants employed. This information was used to inform the development of the quantitative data gathered in 2006 related to stressors and coping.

**Chapter 3: Method**

*Inclusion/Exclusion Criteria*
The corpus for this narrative review was considered carefully. The intent of the narrative review was to highlight the resilience-based research that was conducted by the InPsych research lab and directed by Dr. Swaney. Inclusion and exclusion criteria were both established. The inclusion criteria were set as the following: the research had to come from the UMT Psychology department, students had to be InPsych Scholars, and the research was conducted at the level of theses and dissertation projects, and that Dr. Swaney was either chair, co-chair, or a committee member, and of course, the research was resilience based. Projects included quantitative, qualitative, and mixed (both quantitative and qualitative) studies, as Dr. Swaney conducted research with both methodologies. Exclusion criteria were: inaccessible or unavailable research products; research posters and conference presentations; research that was not resilience based; and research that was not guided by Dr. Swaney. Dr. Swaney either chaired or co-chaired almost all the included studies.

The inclusion and exclusion criteria went through an iterative process of being set. There was a process of considering what research to consider including/excluding, and why. Some of the criteria were adjusted to create a more cohesive and focused corpus that reflected Dr. Swaney’s effort and influence in researching resilience in American Indians. The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA, Moher et al., 2009) flow diagram depicts the selection process.

Rationale for the selection criteria was established to help show Dr. Swaney’s influence or presence with resilience-based research in the lab. I began with a list of the N InPsych students I received from the University, and then looked up their theses and dissertations. Next, I examined whether the studies were resilience based, and if
they were chaired or co-chaired by Dr. Swaney. The reasoning behind the selection criteria was to show examples of the work resulting from collaboration between Dr. Swaney and her students. I also wanted to show how the studies were conducted, and what the findings, implications, and resulting recommendations of the studies were. Most of the authors (students) of the studies gave permission to use their work, although others did not reply to my request, but these studies were used regardless, as they were available to me as a student accessing the University’s library database.

A few of the studies used the Coping in Later Life Survey/Native American Resilience Project (CLLS or NARP). The data for the CLLS were archival and gathered around 2006 and 2007. Some students used the archival data from the Coping in Later Life surveys (both qualitative [Pyke] and quantitative [Vaile, Croxton]), while other students gathered their own qualitative and quantitative data. Pyke (2019) used the CLLS qualitative interviews and data, while Vaile (2015) and Croxton (2015) used the quantitative data that were gathered. Other InPsych scholars used the CLLS but did not use resilience-based models for their studies; these studies were excluded from this analysis.

Basic information for the studies was compiled, such as method of analysis (quantitative, qualitative, or mixed and particular method of analysis), variables that were examined, main findings and results that were connected to resilience, and research recommendations based on the findings, as well as directions for future research. Other notable information, such as unexpected challenges the research faced, was also noted, and described. These studies were then examined together by method and across methods to analyze the corpus of research as a whole.
Resources Identified (potential resources included the total body of Dr. Swaney’s work and InPsych projects)

Resources screened (graduate student projects included)

Resource abstracts assessed for eligibility (n=28)

Resources included (n=13)

Resources excluded (presentations, posters, talks, non-graduate student work)

Resources excluded (n=15)
(i) studies did not include a resilience theme
Chapter 4: Results (Synthesis and critique)

Introducing the studies

The graduate students of the InPsych research lab conducted research as part of their graduate program requirements and for their theses and dissertations (such as publications and conference presentations). The focus of narrative review was on resilience-based research conducted by InPsych students while under the guidance of Dr. Swaney. This will create a space for Dr. Swaney’s focus on resilience-based research to emerge. The included studies will be introduced via the students of the lab that conducted them. As it will be revealed, the students were all Native American, but came from a broad variety of backgrounds. The research interests were also somewhat varied, although the presented research shared resilience as a component. There is a reference list of the 13 studies in the appendices of this dissertation. As a note, the studies were conducted with many differing populations of American Indians. The specific names of tribal communities will not be listed here, to protect community confidentiality, as recommended by Norton and Manson (1996).

The Studies by Methodology

Qualitative. Dr. William Shunkamolah wrote his thesis in 2009, with Dr. Swaney as his thesis chair. His thesis title was “Coping with the Death of a Family Member: An Exploration of American Indian People’s Experience.” The study investigated coping with the death of a family member in a sample of 12 American Indian adults living in or near Missoula, MT. The work examined persons who had experienced the death of a family member within a 1–5-year period. For this qualitative study, he used Grounded Theory to investigate coping strategies that were used to deal with the death of a family
member. Coping strategies were found to be like those of other studies; however, participants used cultural coping mechanisms that were individually, family, or communally based, and sometimes used guidance (such as the help of an elder) to practice these coping mechanisms. There was also evidence of some benefit to being open to other forms of coping such as psychotherapy, although results were mixed (negative, neutral, and? positive). As far as the negative experience, one participant felt they had to comfort their counselor (giving comfort instead of receiving comfort). The neutral experience was that of another participant who felt that therapy wasn’t helpful at addressing the core issue but was helpful in a limited way. Another participant described that therapy helped with their coping and grief. Dr. Shunkamolah recommended that qualitative research continue to further examine bereavement/grief in American Indians, as the qualitative approach could allow the American Indian grief experience to emerge more fully, and without some of the assumptions of quantitative research (such as inventories improperly conceiving of and incorrectly assessing grief in American Indians). Additionally, he recommended that future research investigate how cultural coping is transmitted/communicated, American Indian perspectives on non-Indigenous coping methods, interactions between American Indians and health care professionals in Western health care institutions, and the use of humor as a coping mechanism during bereavement.

Dr. Ann Douglas’s (2013) qualitative thesis, "The Lived Experience of American Indian Teen Parents from a Northern Plains Tribe" was co-chaired by Dr. Swaney. Dr. Douglas’ qualitative study aimed to better understand the lived experience of American Indian teens, based on Giorgi’s Phenomenological method (cite). She gathered her own
data, which was composed of interviews with seven American Indian teen parents who lived on a Northern Plains Indian Reservation. She prompted participants with the following: "Please tell me about your experience as a teen parent." Dr. Douglas found the supportive role of a grandmother to be protective against the challenges of being a teen parent, which included unhealthy relationships with partners. Resilience was found in relationship with an elder. Corresponding components of resilience among these participants included positive life changes, the role of a supportive grandmother, teens taking on the parenting role, recognition of the importance of education, and decreasing personal risky behavior (such as drinking alcohol and violence). Her recommendations for future research included broadening recruitment for participants for a more representative sample, including more male teen parent participants, investigating unhealthy relationship patterns, and conducting longitudinal studies regarding American Indian teen parenting.

Drs. Swaney and Fiore co-chaired Dr. Kristen Pyke’s (2019) thesis, “A Qualitative Study of Native American Older Adults and Elderly Depressive Symptoms and Protective Factors.” This work examined data from the Native American Resilience Project (Wallace & Swaney, 2007b). Pyke (now Pyke-Pierce) used grounded theory to investigate depressive symptoms and protective factors against depression in a sample of 11 older American Indian adults who lived on a reservation in the Northwest US. Protective factors or sources of resilience against depression were found to include culture, social support, self-regulation, spirituality, and humor. These mechanisms helped provide strength through self-identity, values and beliefs, social support and availability of guidance, providing purpose through social roles, and distraction from
distress through hobbies or imagination. Dr. Pyke-Pierce made a recommendation for treatment, which suggested that clinicians be aware that within American Indian older adults, the appearance of depression may be more somatic and accompanied by pathological loneliness (social withdrawal due to feeling worthless, as identified by O’Nell, 1996). Given the importance of culture and social support, her research recommendations included continued quantitative and qualitative research into resilience, community-based work to increase relationship-based and culturally-based protective factors (such as fostering family connectedness, creating support groups, providing space for cultural practices), and research into self-regulation (such as distraction from distress) as a protective factor/coping mechanism as it relates to resilience in this population.

**Mixed Methods Works (Quantitative and Qualitative).** Dr. Annie Belcourt’s (2006) dissertation, “Resiliency and risk in Native American Communities: A culturally informed investigation” employed mixed methods. Dr. Swaney served on her dissertation committee. Belcourt’s participants included 164 American Indian students from a tribal community college in the Northwestern US who were surveyed for several variables related to resilience, including social support (Social Support Questionnaire-6; Sarason, Sarason, Shearin, & Peirce, 1987), communal mastery (Communal Mastery Scale (CMS; Hobfoll, Schroder, Wells, & Malek, 2002), coping strategies (COPE inventory; Carver, Scheier, & Weintraub 1989), hope (Hope scale; Snyder et al., 1991), spiritual beliefs (Spiritual Involvement and Beliefs Scale; Hatch, Burg, Naberhaus, & Hellmich, 1998), acculturation (The Orthogonal Acculturation Scale; Oetting & Beauvais, 1991-1992) and enculturation (Enculturation Measure; Zimmerman, Ramirez,
Washienko, Walter, & Dyer, 1998). Components of resilience were measured, such as involvement with Native culture (Ethnic, Culture, Religion/Spirituality scale; Cross, 1998; Long & Nelson, 1999) Brief Resiliency Coping Scale (BRCS; Sinclair & Wallston, 2004) was a measure of coping. Participants also completed measures of stressful life events (Hammen Perception of Negative Life Experiences Survey; Hammen, Marks, Mayol, & DeMayo, 1985), historical trauma (The Historical Loss Scale and Historical Loss Associated Symptoms Scale; Whitbeck, Adams, Hoyt, & Chen, 2004), quality of life (Quality of Life Inventory; Frisch, 1994), personal growth (Stress-Related Growth Scale; Park, Cohen, & Murch, 1996), general functioning (Outcome Questionnaire (OQ-45.2, Lambert, Hansen, Umpress, Lunnen, Okiishi, Burlingame, et al., 1996), and general emotional functioning Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). Participants also completed the thought listing technique (Cacioppo & Petty, 1981), an open-ended measure wherein they were asked to describe the story of someone whom participants thought was resilient.

Using linear regression, Belcourt (2006) found that social support, hope, general resilient coping abilities, traditional cultural and spiritual practices, ethnic pride/enculturation, and communal mastery were associated with higher levels of resilience. On the thought listing technique, participants identified supportive relationships, spirituality, strength, and adaptability as key components of resilience.

Resulting recommendations included longitudinal research investigating the resilience in this population, as her study was cross-sectional. Potential treatment implications consisted of incorporating cultural spirituality as a possible suicide prevention strategy, revitalization of culture to impart resilience associated with cultural
practices and identity, research collaborating with tribes to develop more effective health care systems that are culturally appropriate and resilience-based, and cautiously navigating the use of psychology research with American Indians in order to avoid harm, maximize benefit, be culturally appropriate. Finally, she recommended providing a voice in research development efforts and planning for the tribal communities with whom researchers partner.

Dr. Swaney chaired Dr. Stacy Miller’s (2008) dissertation, “Change and Recovery from Substance Misuse: Native American Perspectives.” Dr. Miller’s (2008) work employed qualitative and quantitative methods. She used basic quantitative descriptive statistics and Grounded Theory as her qualitative analysis method. Participants included eight American Indians who had been sober or in recovery from substance misuse for at least 3 years; participants were located in the Western Montana. Her theoretical model combined the transtheoretical model of change (TMC; Prochaska & DiClemente, 1984) with the medicine wheel model (White Bison, 2002). Measures included the Native American Acculturation Scale (Garret & Pichette, 2000 revised by Trahan, 2004); the Decisional Balance Scale (Maddock, 1997), and the Self-Efficacy Scale (Maddock, 1997). It is important to note that sobriety was defined as no longer using alcohol, and recovery was the continued healing journey, which may be lifelong. A semi-structured interview was also conducted.

After qualitative analysis, a combined Medicine Wheel/Transtheoretical Model of Change was supported. Visually, the combined model looks like five circles that are positioned around a center, with each circle enclosing the other. This image would look like a target, with each ring representing a stage of motivation; the outermost ring
representing precontemplation, moving inward to contemplation, preparation, action, and the inner center representing maintenance. The medicine wheel component takes the concentric rings or stages of motivation and divides each into four parts: mental, emotional, physical, and spiritual components of each stage of motivation. Dr. Miller described the spiritual component of the recovery path through the stages of motivation as providing meaning to the unseen path ahead.

Another model that was created from the data was a flow chart describing “Theoretical model for change and recovery from alcohol misuse.” The main components were a causal event (such as making the decision to quit), which branched into two separate phenomena – balance or change. The balance branch consisted of sobriety and recovery phases, which were broken into the mental, emotional, physical, spiritual, and whole domains. Coping strategies were divided into 4 areas of the medicine wheel as well, related to searching for balance within these domains. Exercising and attending inpatient treatment were examples of the physical domain, getting an education and doing self-reflection were part of the intellectual domain, wanting a sense of belonging and feeling comforted were part of the emotional domain, prayer and meditation were part of the spiritual domain, and taking care of oneself and taking care of others were part of the whole domain.

The other branch of the flow chart, after the causal event, was creating new patterns of behavior. These new patterns were enabled by shifts in perspective, which were associated with recovery/sobriety and included experiencing a spiritual moment, remembering why one quit drinking alcohol, examination of self and others, and reinforcing shifts in perspectives or behaviors that promoted recovery/sobriety. One
specific example was a shift in behavior through experiencing a spiritual moment. A participant described extreme distress while in the hospital as the result of severe alcohol intoxication. There was a nurse who came and prayed with them; the participant described the nurse as an “angel” (p. 86), and after the visit, the participant slept 2 days due to extreme exhaustion. On awakening, the participant described a sense of peace; the participant described it as “a miracle for sure” (p. 86), one which was the first part of their journey towards sobriety and recovery.

Dr. Miller’s (2008) recommendations for treatment and research were the potential use of combined Western/Indigenous models (e.g., the combined Transtheoretical Model of Change/Medicine Wheel Model, referred to hereafter as the TMC/MW model). The aspects of seeking balance in the domains of the mind, body, emotions, and spirit were aligned with the medicine wheel. She argued that researchers and practitioners should think beyond conventional models (e.g., toward non-Indigenous models) when working with American Indians. Re-examination of strategies for change in American Indian communities, using the TMC/MW model, and the use of tribal traditional beliefs within the process of change/recovery were also recommended. Additionally, Dr. Miller recommended the study for replication with other tribal groups, and potential research using the combined model (as previously described) for those suffering from substance use related to trauma. Regarding treatment, Dr. Miller stated that such a model would help clinicians better understand the process of sobriety and recovery through the lens of their clients and may help with more effective treatment planning. Finally, she suggested that her heavily qualitative study should be followed up with quantitative study that would use a measure assessing the domains of balance and
change. A final recommendation was the use of enculturation (movement back into traditional culture) rather than acculturation (movement away from traditional culture), as focusing on enculturation may provide a framework which has space for sources of traditional culture as a source of resilience, such as traditional activities and spirituality. Also, it was Dr. Swaney’s thought that enculturation was a more appropriate focus of research in the context of colonization (and that an individual could fight acculturation through their own active efforts to enculturate themselves).

Dr. William Shunkamolah completed his dissertation in 2012, with Dr. Swaney serving as chair. His work, “A culture specific grief intervention and its affects (sic) upon coping behavior and perceived social support among American Indians: A treatment development study” consisted of the construction and implementation of a culturally adapted grief retreat designed to address the symptoms of historical trauma in a sample of American Indians from a tribal community in the Northwestern US. Participants included 40 self-selected American Indian tribal community members who volunteered to participate in the grief retreat. Data were gathered using a demographics survey, a grief history questionnaire, the Brief COPE inventory (Carver, 1997), and the Interpersonal Support Evaluation List (Cohen, et al., 1985). Dr. Shunkamolah reported that the measures were culturally vetted, using a focus group composed of three tribal members, examining offensiveness, relevance, wording, and specificity of the items. These measures were administered and re-administered at pre-grief intervention, immediately post-intervention, and at 1-month and 3-month follow-ups. As a note, the study suffered from a small n and rather sizeable attrition (he began with an n of 40; at one collection point, only 30% of the participants completed measures).
Quantitative analysis (ANOVA) revealed an intervention effect, such that grief group participants had lower substance use and self-blame following the group. A qualitative analysis, which used an unspecified methodology, revealed a benefit from the intervention components of enculturation and education. This benefit was described as reenforcing social identity and social support and providing cultural knowledge about coping with loss. Education centered around historical trauma, grief and loss, and psychoeducation around emotions and healthy coping behaviors.

Participants shared their perspectives on the importance of cultural components of the intervention. The effects of the intervention were seen through the mechanisms of sharing of grief and trauma experiences (and finding relief), a collective healing, expansion of support networks, increased connection to community, and the development/adjustment of effective coping behaviors. As Shunkamolah (2012) reported, “the continued provision of grief retreats and availability of social support may positively affect the mortality rate of the community” (p. 69). He recommended that future research use waitlists as a component of experimental design, to better evaluate the effects of such an intervention, and to use measures which are appropriate and adapted for American Indians, such as a grief inventory that measures historical trauma. These approaches could improve a study’s ability to properly assess the effects of such an intervention with American Indians.

**Quantitative.** Dr. Annie Belcourt completed her thesis in 2003. Dr. Swaney served on her thesis committee. Belcourt’s (2003) work, "Native American depression: a cognitive vulnerability analysis" entailed a quantitative comparison of cognitive vulnerability to depression in samples of American Indians and non-American Indians. A
total of 136 participants from two tribal colleges in the Northwestern US provided data. Participants included 93 American Indians (53 enrolled, 40 descendants) and 43 non-American Indians.

She tested both a moderation model, with stressors, cognitive vulnerability depression, and an interaction effect (stress x vulnerability) to predict depression and a mediational model, with cognitive vulnerability to depression potentially mediating the relationship between stressors and depression. She tested the models three ways using multiple regression – with a combined sample (Native and Non-Native), a Native sample, and a Non-Native Sample. Data were gathered using the Extended Attribution Style Questionnaire (Metalsky & Joiner, 1997), Hammen Perception of Negative Life Experiences Survey (Hammen, Marks, Mayol, & DeMayo, 1985), Hopelessness Depression Symptom Questionnaire (Metalsky & Joiner, 1997), Beck Depression Inventory-II (Beck & Steer, 1987), and the Orthogonal Acculturation Scale (Oetting & Beauvais, 1991-1992). The only moderation model that evidenced statistical significance was with the Non-Native sample. In this model, depressive symptoms changed the relationship between stressors and cognitive vulnerability to depression. The other moderation models and mediation models did not hold out. So, it is interesting that the moderation model that held true for the Non-Native sample did not hold true for the Native sample. In the Native sample, depressive symptoms did not change the relationship between stressors and cognitive vulnerability to depression, even though the data showed that Natives faced higher levels of stressors; furthermore, the Native sample showed lower levels of certain styles of cognitive vulnerability to depression than their Non-Native counterparts.
Her findings suggested that while the American Indian participants faced more environmental stressors than non-Native participants, they did not report significantly higher scores on the inventories measuring depression, suggesting the likely presence of resilience factors. She posited this resource could be “cultural identification to traditional Native American culture” (p. 45). In contrast, she found that for Native Americans, acculturation with White culture was a risk factor for the development of depression. In other words, Native participants who scored higher on the Caucasian American Acculturation scale were more likely to endorse more severe symptoms of depression ($r=.218$, $p<.05$). Based on the results, Belcourt recommended continued examination of the cultural appropriateness of measures used with American Indians, and the expansion of similar research to other tribal communities. She also recommended that research findings be translated into treatment, with Native American culture being viewed as a protective factor against the development of depressive symptoms in the face of life stressors (due to the positive relationship between higher acculturation scores and higher depression scores in the Native sample). She also recommended that community-based programs make use of such resilience components as Native American culture.

Dr. Ciara Hansen’s (2014) thesis, “Spiritual Practices among Northern Plains Tribal Members as a Protective Factor in the Relationship between Unexpected Deaths and Traumatic Grief,” was chaired by Dr. Swaney. In this quantitative study, Hansen (2014) used multiple regression to examine spiritual practices as a moderating source of resilience that alters the relationship between unexpected deaths and grief. Participants included 87 American Indian tribal members from a Northern Plains tribal
community ranging from 18-81 years old. To get a more appropriate and accurate measurement of grief, Dr. Hansen also culturally vetted the Inventory of Traumatic Grief using a focus group examining a few key areas: overall impressions of the measure; did the instrument accurately reflect the concept of grief among the tribe, and what was potentially missing. Data were gathered using a demographics survey (Tell Us About You Questionnaire; Shunkamolah, 2012), Grief History questionnaire (Shunkamolah, 2012), Grief History Questionnaire – revised (Hansen, 2014), Inventory of Traumatic Grief (Prigerson & Jacobs, 2001), and the Inventory of Traumatic Grief (which was culturally vetted by Hansen; Hansen, 2014). The vetting process used five tribal members from the community. The process revealed 3 of the items were potentially offensive but rated the overall measure as “quite relevant” to “highly relevant” (as measured by the implemented Likert scale), and revisions were made to the instrument to reflect the feedback from the raters. The resulting ITG-R had a high level of internal consistency with the sample (Cronbach’s α=.96).

Results of the study indicated that those who experienced more deaths experienced more symptoms of traumatic grief ($p<.05$). Results also indicated a difference between those who participated in traditional spiritual practices and those who did not, in relation to their grief experience. The participants who were active in their participation experienced more deaths than those who were not active; and, interestingly, those who were actively participating in spiritual practices did not have higher levels of grief. It was posited that this active participation in traditional spiritual practices buffered against grief when participants faced unexpected deaths. Dr. Hansen argued that the cultural emphasis on relationship buffered against the perception of
loss; it was postulated that continued relational attachment to deceased persons may provide a source of resilience. In other words, spiritual practices reflect the perspective that the relationship with the deceased does not end with their death, instead the continuing relationship changes. For instance, the deceased becomes a part of the person, or the person continues to be guided and perhaps protected by that person even after their passing. Dr. Hansen recommended investigation into religion vs. spirituality with grief and consultation with American Indian elders. and to continue to examine appropriateness of measures, and how grief within American Indian populations is experienced. Dr. Hansen recommended that clinical interviews be used to investigate content validity of the Inventory of Traumatic Grief – Revised, in order to understand how people experience multiple deaths (as is common with American Indians) as opposed to a grief related to a single death (which the ITG was designed to measure). Regarding translation of her findings into practice, it was recommended that treatment approaches should integrate traditional practices and spirituality/strength-based tribally-specific interventions informed by research. Although Hansen did not propose how this would unfold in practice, it may involve the inclusion of traditional practitioners in the structure of mental health services (such as providing traditional counseling or healing services, or connection to healing ceremonies through the tribally-based mental health organization). Additionally, tribally-based mental health organizations could help to support local tribal cultural events and infuse culture into mental health services (such offering traditional plant medicines). More conventionally, this would mean providing culturally informed mental health services (such as culturally adapted CBT or grief counseling). She recommended the investigation of other
predictive factors for grief (such as how close the relationship was and anxiety) and maladaptive grief (and if maladaptive grief even exists) within American Indian communities to gain a more comprehensive understanding of grief as well as identification and exploration of other protective factors against the development of grief. She also recommended qualitative grief research in order capture the lived experience of grief in American Indians, without the constraints imposed by quantitative measures. An open exploration of what the experience of grief is, as experienced by American Indians could help identify particular cultural or spiritual practices that are protective. Regarding grief assessment, she recommended the use of structured interviews and measures such as the Persistent Complex Bereavement Related Disorder or Prolonged Grief Scale (Prigerson et al., 2009). Dr. Hansen also supported the continued development of community-defined tools and measures that respect local tribal epistemology, to ensure that the tools are relevant and accurately assess grief as experienced by members of that culture.

Ennis Vaile completed his thesis in 2015, which was chaired by Dr. Swaney. It was titled “Health issues and aging in American Indian older adults: Resilience through adversity.” Vaile examined data from Wallace and Swaney’s (2007b) Native American Resilience Project. Data came from the CLLS, whose participants were tribal members from a reservation in the Northwestern US. In his study, resilience was observed among older adults who had multiple health conditions, but still had not developed significant depressive symptoms. Vaile’s (2015) quantitative study used multiple hierarchical linear regression and multiple hierarchical logistic regression using two groups – those who were depressed (or had scores on the CES-D above a certain cut-off) and those who
were not depressed (or had scores on the CES-D below a certain cut-off). Participants consisted of 158 American Indian older adults and elderly (aged 50 and older). Data were gathered using a demographics survey, a measure of depressive symptoms (Center of Epidemiological Studies Depression Scale; CES-D; Radloff, 1977), a physical health conditions inventory (Chronic Conditions Checklist; John et al., 2003), an assessment of self-perceived health (Self-Reported Health; Harris et al., 1992), social support (Multidimensional Scale of Perceived Social Support; Zimet et al., 1988), assessment of perception of control (Personal Mastery Scale; Pearlin et al., 1981) and the Communal Mastery Scale, which measured the ability to use social support to accomplish goals (Hobfoll et al., 2002). Vaile’s linear regression analysis revealed that depressive symptoms were not correlated with age: aging was not seen to be predictive of depression. However, gender was related to differences on the CES-D, with males less likely to have total scores below the cut-off of 16, suggesting a female identity was associated with more frequent depressive symptoms, which is consistent with existing literature in the general population (cite). There were several sources of resilience that were identified: a higher level of education (such as attending some college, or graduating from college) was associated with resilience (i.e., a lack of significant depressive symptoms despite multiple health conditions), as was being married or having a life-partner. Additionally, across the board, having fewer chronic health conditions was associated with lower CES-D scores. Positive evaluations of health status were sources of protection against depressive symptoms but only up to a certain point, where the number of chronic health conditions began to outweigh the buffering effect of the positive evaluation. In other words, Vaile (2015) observed a limit on the
resilient effect of positive evaluations/self-perception of health in the face of an increasing number chronic health conditions. Other sources of resilience in the face of health conditions included social support and personal mastery (the perception of having control over what happens to oneself). Communal mastery also emerged as a protective factor, but not in the full regression model, which included personal mastery, which “outshone” communal mastery as a source of resilience. This finding suggested that the ability to use social support to accomplish goals contributes to resilience, but the perception of control over what happens to oneself appears to be more important.

Vaile’s (2015) logistic regression models treated the CES-D, which measured depressive symptoms, as the outcome variable (presence of depression or lack of depression). In this analysis, education status, number of chronic health conditions, self-reported health status, and personal mastery demonstrated significant relationships with the presence of “symptomatic” depression (or having a CES-D score above a certain cut-off). Vaile found a large effect of health conditions on symptoms of depression ($R^2$ was .485 for his model, which is considered to be a ______ effect). This indicates that there is a significant relationship between a higher number of chronic health conditions and symptoms of depression. Translating these results into treatment recommendations for older American Indians, Vaile (2015) highlighted education, health, self-perception of health, and perception of efficacy or mastery as areas to assess when examining depression. Concerning treatment, he recommended implementing behavioral strategies to offset the symptoms of chronic health conditions, using cognitive-behavioral strategies to help enhance self-perception of health, and ? defining areas of misperception that could be improved. He also recommended strengthening social
support or improving the perception of social support. Additionally, maintenance of personal mastery, including management of health conditions (such as developing confidence in managing symptoms or having effective engagement with healthcare systems), and development of mastery in other areas not directly related to chronic health that could help decrease depressive symptoms (e.g., exercise or giving back to their communities) were recommended. Regarding future research, Vaile recommended investigation of other contributing components to resilience in the face of health issues in older adults. He also advocated for similar research to be conducted with other groups of older American Indian adults, with the recognition of broad heterogeneity among different groups of American Indians. In closing, he remarked that successful aging (or being resilient in the face of developing health conditions) was the norm among the participants in his study.

This writer, Matthew Croxton (2015), completed a thesis under Dr. Swaney’s direct mentorship. Croxton’s (2015) work, “Remembering together: The relationships of historical loss, social support, depression, and resilience” examined data from the Native American Resilience Project (Wallace & Swaney, 2007b). Data came from the CLLS, whose participants were tribal members from a reservation in the Northwestern US. This quantitative study used hierarchical multiple regression to study the moderating effect of social support on the relationship between historical trauma and resilience. Participants consisted of 160 American Indian older adults and elderly (aged 50 and older) from a reservation in the Northwestern United States. Data were gathered using a demographics survey, and inventories which consisted of the Historical Loss Scale (Whitbeck et al., 2004), Multidimensional Scale of Perceived Social Support
(Zimet et al. 1988), and the Center of Epidemiological Studies Depression Scale (Radloff, 1977). The full moderating model was not significant, but the relationship between social support and resilience/depression was significant in that only MSPSS predicted CES-D scores, $F(6, 109) = 5.09, p < .001$, adjusted $R^2 = .18$.

It was notable that thinking about historical loss was not significantly associated with depressive symptoms despite what previous research suggested (Whitbeck et al., 2004). However, the relationship was approaching significance at $p = .06$. Croxton (2015) noted that this could indicate resilience regarding historical loss. In other words, in the presence of social support, the effects of historical trauma did not result in a significant level of depressive symptoms. Resilience was associated with higher levels of perceived social support and less frequent thoughts of historical loss. In contrast, lower levels of perceived social support and/or more frequent thoughts of historical loss may be a risk factor for depression. The study was titled “Remembering Together,” as a way of recognizing the transformative role of supportive relationships and conceiving of the space within which these American Indian older adults shared their thoughts of historical trauma. Recommendations consisted of providing social support for those who are isolated or who are depressed, and continued exploration of other factors that contribute to resilience.

Dr. Desiree Fox (2015) thesis was also chaired by Dr. Swaney. The work “Resilience through adversity and aging: Historical loss and resilience in adults from a Northern Plains Tribe,” presented a quantitative study that used multiple regression to examine relationships between historical loss, resilience, and age. Participants consisted of 37 American Indian adults age ranging from 18-60 years old. Data were
gathered using from participants in a tribally-based grief retreat. The survey consisted of a demographics questionnaire, the Brief Resilience Scale (Smith et al., 2008) and the Historical Loss Scale (Whitbeck et al., 2004). Dr. Fox used a moderator model, with age interacting with the relationship between thoughts about historical loss (HLS) and the resilience measure. Regression analysis revealed that the full model was not significant and that the three variables were not related; age and thoughts about historical loss were not associated with resilience, and age did not moderate the relationship between thoughts of historical loss and resilience. This result was perhaps due to low power from only 37 participants. However, Dr. Fox postulated that culture and pity/empathy for others were protective factors for the participants (as described in O’Neill, 1996). She recommended additional examination of age and the historical loss scale using larger samples that might have more power, and that future research would likely benefit from a culturally adapted measure of resilience. She also recommended qualitative research that would examine the roles of culture and communal mastery, and quantitative research using resilience-based moderator models that could explore connections between culture and historical trauma.

Dr. Ann Douglas’s (2018) dissertation was titled, “It takes a village to raise a child: Perceived community support and parenting satisfaction and efficacy among American Indian young mothers.” Drs. Swaney and Silverman co-chaired the project, which studied American Indian young mothers and relationships among their experiences with parenting, social support, and intimate partner violence. Participants included 134 American Indian teen mothers who lived on a reservation in the Northwestern US. Data were gathered using an online survey consisting of a
demographic questionnaire, and self-report inventories including the Perceived Community Support Questionnaire (Herrero & Gracia, 2007), Abusive Behavior Inventory-Revised (Postmus et al., 2015), Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987), and the Parenting Sense of Competence Scale (Gibaud-Wallston & Wandersman, 1978). Regression analysis showed that current attachment to a mother/father/friend was related to increased parenting satisfaction, but even more so for current attachment to one’s father. This indicated a supportive relationship between a young mother and her father as being important for young mothers feeling confident as parents $F (1, 96) = 16.751, p < .0001$. Lack of intimate partner violence was associated with improved parenting satisfaction and parenting efficacy and also provided protection from stigma and sense of shame, which she posited was related to the influence of mainstream culture. Recommendations include increasing sample size to increase power and using a broader sample to increase generalizability, and that the measures be culturally vetted. Dr. Douglas recommended that future research should continue to examine roles of specific attachments (father, mother, peers), and should investigate why community support was associated with lower levels of parenting satisfaction and efficacy. Perhaps this was due to the stigma that was potentially attached to being a young mother. Additionally, she recommended that future research be conducted regarding intimate partner violence (given the presence of IPV with many of the participants), as well as the role of grandmothers (given that this role didn’t surface as being important) and that this future research be conducted with an Indigenous perspective, such as recognizing the role of traditional culture and worldview. Furthermore, Douglas (2018) noted that future research could
investigate differences in perception of community support in reservation vs urban participants, as all the participants from her study lived on a reservation and there could be potential differences in these demographics. As far as translation of the research, Dr. Douglas recommended that parenting programs acknowledge the role of positive attachments (father, mother, peer), bullying related to stigma, the potential role of intimate partner violence, and culture. She also recommended that community-based programs work to end bullying and the stigma associated being a young/teen parent and increase family attachment for young teen parents. This could be done by using young/teen parenting Native research to inform the efforts of parenting programs and other tribally based social programs.

Dr. Ciara Hansen’s (2018) dissertation, which Dr. Swaney chaired, was titled, “Risk and resiliency factors in predicting recidivism among Native Americans on a Montana reservation.” The study examined factors that contributed to or protected against relapse into criminal behavior. The study used archival data that came from a tribal reentry program. Study participants consisted of 166 American Indian adult tribal members who were criminally involved and currently living on or planning to return to a reservation in the inland Northwest. The study was conducted in conjunction with a reservation-based reentry program. She used hierarchical binary logistic regression to predict recidivism based on more conventional assessment such as the Level of Service Inventory-Revised (Andrews & Bonta, 2000) and the Risk Intake Assessment Tool (Fox & Hansen, 2016), as well as cultural components that were assessed with the Historical Loss Scale (Whitbeck et al., 2004), Historical Loss Associated Symptom Scale (Whitbeck et al., 2004), and the Cultural Connectedness Scale (Hansen & Fox, 2016).
The LSI-R was found to have poor scale reliability (Cronbach’s $\alpha = .48$). Regarding the HLASS, Whitbeck et al. (2004) used structured equation modeling to examine the components of the HLASS. They found the scale items fit into two component factors - depression/anxiety and anger/avoidance. Hansen (2018) found that feelings of anger and avoidance$^3$, if connected to thoughts of historical trauma, were a source of resilience against recidivism; this indicated that anger related to historical trauma can potentially be adaptive in this context. Additionally, increased cultural connection (specifically increased participation in cultural activities) was also identified as a resilience factor. Frequent thoughts about historical loss and increased cultural connection, specifically increased participation in cultural events, were identified as resilience factors. Participants were allowed to freely define cultural connection as whatever they felt qualified; however, these might be such things as gathering wild foods, attending healing or seasonal ceremonies, listening to traditional stories, or learning traditional crafts. In regression analysis, the role of cultural participation was associated with a lower risk of recidivism, revealing that culturally relevant factors are important when assessing recidivism in American Indians.

Hansen (2018) made several recommendations resulting from her analysis. They are grouped into three major categories: recommendations for reducing recidivism, model or program building, and research efforts. To reduce recidivism, Hansen (2018) recommended boosting educational efforts at the primary level, as 2/3 of her sample did

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$^3$ The anger/avoidance construct of the HLASS scale (Whitbeck et al., 2004) was composed of the items ‘Often feel anger’, ‘Uncomfortable around white people when you think of these losses’, ‘Shame when you think of these losses’, ‘Rage, Fearful or distrust the intention of white people’, ‘Feel like it is happening again’, and ‘Feel like avoiding places or people that remind you of these losses’. 
not have a high school diploma, as well as providing vocational rehabilitation. In addition, Hansen (2018) focused on the importance of enculturation, such as the use of traditional value-based frameworks for interventions, including cultural activities and increasing access to cultural resources and elders. Recommendations regarding model or program building and research efforts included using the reentry program data to build a more comprehensive model for recidivism risk reduction and continuing the use of a holistic program approach (such as integration of mental health services, connections to Tribal Health, help with access to food, and housing, and medical services, as well as cultural mentoring), with use of data tracking and program evaluation based on local norms and populations. Hansen noted that future research efforts should continue to identify resiliency factors that help reduce recidivism in this population. Potential efforts included continuing to build a more accurate risk assessment tool that identifies criminogenic factors unique to American Indians or this sample of American Indians. Future research, Hansen noted, should also investigate gender differences regarding recidivism and parse out the highly effective reentry intervention as a potential confound. Criminogenic factors should continue to be assessed for construct validity. Future studies should have researchers that are formally trained with the LSI-R and should investigate the Historical Loss Scale and Historical Loss Associated Symptoms Scale with American Indian offenders.

Results across studies

The studies employed varied methodologies, including qualitative, mixed methods (qualitative and quantitative), and solely quantitative. They also examined mixed aims along the lines of building theory/informing practice versus conducting
interventions. While all participants were Native, the populations studied varied in many aspects, including rural versus urban residency, and older versus younger age. While the studies were diverse in many areas, they all had the common themes of using psychology as a lens to study resilience in American Indians. Additionally, there was a shared very clear and broad theme of the need for continued culturally appropriate research, and a presence of community or tribally based research and interventions. Many of the qualitative studies recommended follow up with further quantitative research, and vice-versa. Whatever the methodology of the research, there is clear need for the work to continue.

Many components of resilience that were found were based around culture, relationships, spirituality, and education – but also with the components being embedded in broader systems such as represented in Bronfenbrenner’s ecological model (Bronfenbrenner, 1979) which also included the chronosystem, or time. These elements should be seen as being interrelated, and of course through a cultural lens.

**Qualitative**

The qualitative studies included a few broad but related themes that supported resilience, including culture, social support, spirituality, and effective coping. It should be noted that these themes are inter-related. For instance, effective coping may be some kind of cultural/spiritual activity that is embedded in the context of social support.

Recommendations included continued exploration into the main areas of their respective research (bereavement, parenting, and depression) to clarify the findings, while continuing to use culturally appropriate research methods and process. More specifically, the recommendations consisted of continued quantitative and qualitative
research into resilience (such as self-regulation as a protective factor and/or coping mechanism), as well as community-based work to increase protective factors. Treatment recommendations included acknowledging and conceptualizing the treatment related components of the studies as being culturally influenced. For example, some studies recommended an understanding of specific clinical presentations of mental health concerns, such as depression with somatic and interpersonal symptoms.

**The mixed methods studies (Quantitative and Qualitative)**

Among mixed methods studies, corresponding components of resilience included social support, hope, effective coping abilities, traditional cultural and spiritual practices, ethnic pride/enculturation, and communal mastery (i.e., the ability to use relationships in the community to accomplish goals). Components of resilience that were reflected in the qualitative studies included supportive relationships, spirituality, strength, adaptability, enculturation, and education. Facets related to recovery/sobriety included spirituality, becoming re-motivated to be sober or recover, social and personal inquiry, and reinforcing positive changes. The outcomes of the intervention studies were described as connecting to culture, social support/community, building spaces to share trauma and heal, and developing healthy coping.

Recommendations from these mixed designs included longitudinal research examining resilience to understand some of the causes and effects of the resilience-related factors. One important question that arises when pondering a longitudinal design is using models that may use resilience as a cause or effect. Also, research design could use use of cross-sectional studies that treat resilience as a moderating factor (as
opposed to an outcome). The question may be a bit of a chicken/egg problem, but perhaps some longitudinal research could help clarify this area.

The studies of Miller (2008) and Shunkamolah (2013) had a stronger focus on intervention and/or treatment. Potential implications resulting from Miller's (2008) substance use study included spirituality as a suicide prevention strategy and the revitalization of culture and re-examination strategies for positive change in American Indian communities. Miller also recommended use of theory combining Indigenous/western models, and the use of tribal traditional beliefs within the conceptualization and treatment process of change/recovery. Replication studies were recommended among other tribal groups. Potential considerations resulting from the research related to treatment consisted of using a combined Indigenous/Western model for those suffering from substance use related to trauma; trauma itself is elevated among Native populations, and of course there is continued historical trauma. In examining the influence of culture, Miller (2008) recommended use of the concept enculturation rather than acculturation, as enculturation supports the idea of the individual re-learning or approaching their own culture in the face of cultural erasure and historical trauma. Shunkamolah (2013) recommended continued grief interventions, as "the continued provision of grief retreats and availability of social support may positively affect the mortality rate of the community" (Shunkamolah, 2013, p. 63). Shunkamolah stated that future research with such interventions could use waitlists and recommended the use of culturally vetted measures.
**Quantitative**

The quantitative studies found that resilience was evident across many domains, including cognitive factors (Belcourt, 2003), spirituality (Hansen, 2014), physical health (Vaile 2015), relationships (Croxton, 2015; Vaile, 2015), and culture (Hansen, 2014). These authors discussed continuing the research – such as additional exploration of other factors that contribute to depression and grief, follow up with related qualitative research, use of culturally appropriate models and concepts, continued refinement of assessments or development of new instruments, building found resilience factors into community-based programs, and holistic approaches to mental health treatment. Considered collectively, the quantitative studies supported the idea that tribal community members could benefit from mental health care services that are culturally adapted, culturally driven, and geared toward both reducing health disparities and boosting factors that support resilience. Likewise, caution emerged against recommendations of the use of a western-based epistemology and treatment; cultural adaptation of research and treatment was recommended.

Correlates of resilience included a resistance to depressive cognitions (when compared to Non-Native participants) which was in turn related to an identification with Native American culture. Furthermore, Belcourt (2003) found acculturation with White culture to be a risk factor for depression, further illuminating the importance of Native culture (or some component specific to Native Americans that contributes to the cognitive resistance, even considering more vulnerability factors) in the face of the ongoing process of assimilation. As found by Belcourt (2003, p. 45), "Native Americans
experienced more environmental vulnerability factors for depression yet did not express significantly differential or elevated depression scores."

The studies of Hansen (2014) and Douglas found attachment to be a source of resilience. In a more specific finding of resilience and Native spirituality, Hansen (2014) found that participation in spiritual practices was a buffer against grief regarding unexpected deaths, and that continued attachment to deceased persons may provide resilience. In an examination of parenting, family, and social support, Douglas (2018) found attachment to family and friends and lack of intimate partner violence to be a source of resilience among young Native mothers. An interesting finding was that if a mother’s attachment to a father figure was found to be strong, support from the community was reported to be low. One possible interpretation offered by Douglas (2018) was that if a parent figure can meet the needs of a young mother, community support becomes less important. This possibility likely spoke to the need to seek more close social support (such as immediate family) in a challenging environment. This may identify the importance of the role that fathers can take in providing a supportive relationship for daughters who are young mothers, and that support from the community may be particularly important when a supportive father is not present. Croxton (2015) and Vaile (2015) also found social support to be a source of resilience.

As a way of orienting the reader to a brief discussion about historical loss, it is important to note that two scales exist to measure effects of historical trauma. Whitbeck et al. (2004) created the Historical Loss Scale, which measures frequency of thoughts related to historical trauma, and the Historical Loss Associated Symptoms Scale (HLASS), which measures the frequency of feelings related to historical trauma. The
items of the HLASS compose two factors consisting of anger/avoidance and depression/anxiety. Within the selected corpus, Fox (2015) studied age in relation to historical loss (as measured by the HLS) and resilience. She did not find any significant relationships between the variables, suggesting a picture of resilience. In other words, the author suggested that culture and "pity"/empathy for others could serve as protective factors against the thoughts of historical loss. This writer (Croxton, 2015) also examined historical trauma (using the HLS), but in older adults. I found that Historical Loss was unrelated to symptoms of depression, but the relationship was approaching significance. It is possible that more statistical power or the use of culturally vetted instruments (such as vetting the HLS for the specific sample of participants/tribal community, or vetting the measure of depression) would have revealed a significant relationship. Hansen (2018) used the HLS and the HLASS in an examination of recidivism. Hansen found that increased frequency of thoughts related to historical trauma in combination with feelings of anger were associated with a lower chance of recidivism, suggesting that thinking about and having anger provides resilience against recidivism in this population. Belcourt’s dissertation (2006) found that HLASS, or affective symptoms of historical loss (anger/avoidance and depression/anxiety), were less frequent for those participants who had higher levels of social support. Shunkamolah (2012) used the concept of historical trauma as an explanatory component and intervention target in the design of his grief retreat. He examined the idea that historical trauma is related to unresolved grief. He did not use the HLS or HLASS as direct measurements of trauma. Instead, he used a culturally vetted grief questionnaire, tailored to assess grief in his particular sample of participants.
The research that used archival data from the Coping in Later Life Survey/Native American Resilience Project (Wallace & Swaney, 2007b) presented a relatively cohesive group of findings, as the data were examined in several works. The project consisted of qualitative data gathering followed by quantitative data gathering. The research works had in common multiple variables— including basic demographics (such as age and gender identity), depression, social support, and communal mastery. Vaile (2015) found that age was not predictive of depression, but recommended exploration of other factors that contribute to depression, and qualitative research to examine the roles of culture and communal mastery. In Vaile’s analysis, resilience against depression was associated with higher levels of education, being married/partnered, having fewer (if any) chronic health conditions, positive evaluations of health status, social support, and personal mastery. He found that it is possible that his sample of older American Indian participants appeared to have successfully aged despite the presence and burden of chronic health conditions.

In contrast to the findings of protective factors found within the CLLS, risk factors were also identified in the data set. According to Croxton (2015) and Vaile (2015), unpartnered women who reported lower education, social isolation or had low perceived social support, multiple chronic health conditions, and poor self-reported health status were at risk for depression. According to Croxton (2015), lower levels of perceived social support and/or more frequent thoughts of historical loss appeared to function as a risk factor for depression; consequently, social support for those who are isolated or depressed may boost resilience against depression. The findings related to thoughts of historical loss may contrast those of Hansen (2018). Hansen found that feelings of
anger related to historical loss could be adaptive. I (Croxton, 2015) did not use the HLASS as a measure in my research; however, perhaps future research could examine the depression/anxiety subscales vs the anger/avoidance subscales of the HLASS as they relate to resilience. As a note, Douglas (2013) used data gathered from a different community but found that single teen mothers that had a supportive attachment to their fathers were more resilient than those who did not.

Pyke (2019) completed a study with qualitative data that came from the Coping in Later Life Survey/Native American Resilience Project (Wallace & Swaney, 2007b) and examined depressive symptoms and protective factors found within the interviews of Native elders. She found culture, social support, self-regulation, spirituality, and humor to be protective factors, but suggested confirmatory research and continued exploration of other factors that contribute to resilience in this population. In future work, it may be interesting to explore resilience outcomes or markers that were not explored by scholars who studied the Coping in Later Life data set. This might include the effects of historical trauma using the subscales of the HLASS that measure anger/avoidance, and anxiety/depression. This work would replicate the efforts of Hansen (2018), who examined a different sample.

**Across Methodologies and Studies**

There were common threads across quantitative studies. The first area was by methodology, such as moderation models using regression and focus on particular primary variables (the main variables of the model) or secondary variables (variables that were controlled for or entered as blocks in the regression). Croxton (2015) and Vaile (2015), both working with the same data set – the Coping in Later Life Survey -
examined social support and depression and found a relationship such that lower social support was associated with more frequent depressive symptoms. Using different data sets, Fox (2015, grief intervention) and Croxton (2015, Coping in Later Life Survey) both examined historical loss and did not find historical loss to be significantly related to resilience. Similarly, in the same Fox (2015) grief intervention study, the association between age and depression was examined just as Vaile (2015) tested a moderation model of resilience using the Coping in Later Life Survey. Both examined age and depression but found no significant correlation between the two variables, suggesting that American Indians are not adversely affected by age in these areas.

Age was examined in various ways in different studies. Some scholars examined the effects of age explicitly, while others focused their analyses on participants within specific age bands (e.g., older adults, teen mothers). For example, Fox (2015) did not find age to be significantly related to thoughts of historical trauma. Other studies had participants from selected age bands, such as teen parents or older adults, but age wasn’t directly investigated. Douglas (2013) investigated parenting satisfaction among young American Indian mothers but age was not directly investigated. Vaile (2015) used the Coping in Later Life Survey (CLLS) and his model of successful aging in Native older adults, but age was not directly tested as a variable. This writer, Croxton (2015) used the CLLS as well but I did not directly examine age as a variable. Pyke (2019) used qualitative data from the related interviews of older adults (Native American Resilience Project). These studies found social support to be sources of resilience. It is not surprising that while young mothers found attachment to parents to be beneficial,
older adults found attachment to friends and family to be supportive. The common theme is social support, which will be discussed further below.

Many InPsych scholars also examined social support and found it to be a source of resilience. Although the studies that will be mentioned used different data sets, many quantitative studies found this to be true, including Shunkamolah’s (2009 & 2012) studies on grief where social support was found to be a source of resilience. Hansen (2014) found social support to be a source of resilience in the context of unexpected death; Vaile (2015) found social support to be a source of resilience against depression in the context of chronic health conditions. This writer, Croxton (2015), found social support to be protective against depression in the context of historical trauma, Fox (2015) also found social support to be protective against the effects of historical trauma. Finally, Douglas (2018) found social support to be a source of resilience in the context of young Native mothers. Qualitative studies also found social support to be a source of resilience - Douglas (2013) found this to be true with young Native mothers, Pyke (2019) found social support to be a protective factor against depression, Shunkamolah’s (2012) qualitative component found social support to be protective against grief. Belcourt’s (2006) qualitative component of her study on resilience and risk in American Indian communities found it to be protective against depression. I believe this speaks to the powerful effect of social support, and that relationship can provide a place of strength and healing.

As a brief focus on American Indian women across age, Douglas (2018) and Croxton (2015) and Vaile (2015) will be compared. As mentioned, Douglas (2018) found that young mothers felt more confident as parents if they had stronger attachment to
friends/mother/father (but most notable father) and comparatively, Croxton (2015) and Vaile (2015) found that older American Indians who had lower levels of social support were at risk of developing depression. The important take away is again the buffering effect of social support, and that fathers and friends and family are important sources of support for Native women.

Many studies also found culture (I will include spirituality as a component of culture) as a correlate of resilience, including Shunkamolah (2009 & 2012) as protective against grief, Pyke (2019) as buffering against depression, Belcourt (2003 & 2006) as also protecting against depression, Hansen (2014) as protecting against the effects of unexpected deaths and Hansen (2018) as associated with reduction in recidivism, and Pierre-Fox (2015) as a source of strength against the effects of historical trauma.

These common threads also appear to be related as they are found in American Indian culture; American Indian cultures place high value upon relationship, and so relationship itself has a cultural component. Identity and perhaps Cultural Connectedness (which measures an individual’s perceived connection, access, participation, desire to learn about, and knowledge of their culture; Hansen & Fox, 2016) may be seen to be a part of one another to a degree. For instance, if I were to identify as Navajo, people would want to know where I am from, and my relationships would be explained through a cultural lens (such as an emphasis on the matrilineal line and use of the clan system).

Correlates of resilience also had some common threads in the qualitative studies. Shunkamolah (2009, 2012), Belcourt (2006), and Miller (2008), all found adaptability
and openness to coping (such as using both traditional and western coping behaviors) as common themes of resilience.

Vaile (2015) and Pyke (2019) both examined physical health and depression as correlates related to resilience using different methods (quantitative and qualitative). Vaile focused on the burden of chronic health conditions, while Pyke focused on the appearance of depression (more somatic and interpersonal). Both found important relationships between physical and mental health. Vaile (2015) focused on chronic health conditions and found that the presence of chronic health conditions (and a higher number of chronic health conditions) was associated with higher levels of depressive symptoms. Pyke (2019) found that in comparison to the typical non-Native presentation, depressive symptoms had stronger somatic aspects (such as difficulty sleeping, weight loss/gain, and low energy) but there also was a stronger interpersonal element as well (such as loneliness). Both Vaile (2015) and Pyke (2019) found social support was a source of resilience.

Some consistent recommendations emerged across scholars and studies. For example, further exploration of grief in American Indians was recommended by Shunkamolah (2009), and Hansen (2014) recommended additional research exploring the construct of grief in American Indians (including the phenomenon of multiple deaths as opposed to the effect or measurement of a traumatic single death). Belcourt (2006) and Shunkamolah (2009) recommended research examining effectiveness and use of healthcare systems within American Indian communities, including examination into making them more effective in order to promote resilience, and to make services more culturally informed (and less likely to be seen as unhelpful or ineffective).
Community based research and programming (such as community health programs) were also mentioned as potential targets to help address mental health needs and increase community resilience, which is not surprising given the nature of tribally-based and community-based research. This was highlighted by Pyke (2019) in order to increase protective factors against depression, Belcourt (2006) to develop more effective health care systems, Shunkamolah (2012) to support culturally-based sources of resilience against the effects of grief, Belcourt (2003) to expand resilience based research of protective factors into other Native communities, and Hansen (2014) to support the use of research examining culturally based grief-coping mechanisms, and also Hansen (2018), who stated it would help inform mental health programs (to help build resilience) and reduce recidivism.

**Analyzing and Integrating the Outcomes of the Studies**

It is no surprise that there were recurrent themes of resilience within the qualitative and quantitative research. These included spirituality, traditional culture, and the protective power of relationship. All of the presented research was conducted by and with American Indians within the field of psychology and had some focus on resilience. While all the selected studies examined themes of resilience, the studies varied in terms of intent and specific aims. All of the research in the corpus intended to a large degree to contribute to the well-being of American Indians and to the related body of psychological literature. The studies varied regarding research design and methodology – some focused more on developing a treatment model (Miller, 2008), more on intervention (Shunkamolah, 2012; Fox, 2015), exploring moderation models...
(Vaile, 2015; Croxton, 2015) or how well current psychological inventories performed with a particular population of American Indians (Hansen, 2018).

There are areas lacking research or that could benefit from further exploration. Future research efforts should aim to replicate the work presented here, with continued exploration and an attempt to build a body of relevant and specific research, such as studies around resilience in particular populations of American Indians. Many studies could contribute to both the breadth and depth of the research, forming a cohesive and comprehensive corpus. However, this would likely take immense effort and a long period of time to accomplish. It would be interesting (although the tenability may be uncertain) to use the Coping in Later Life Survey to continue to build the resilience-based research, based upon the initial studies of Croxton (2015), Vaile (2015), and Pyke, (2019). There is much work to be done to establish a foundation of resilience-based research in American Indians.

Most, if not all the research presented in this review was original and exploratory. It is difficult to gauge how this research compares to other similar research because there are not many highly similar studies that examined similar populations; there is a small but burgeoning body of research. Data collection for the Coping in Later Life Survey was completed within a specific community and age group (56-89 years old). Perhaps similar coping studies could focus on different age groups or follow up that 2006 research with another similar effort. Collecting new data 20 years after the initial data gathering would provide a second snapshot of the studied population. It may also be interesting and useful to conduct studies in different areas (rural vs urban, on-
reservation vs off-reservation) or to replicate studies on different reservations (such as Dr. Douglas’ study or the Coping in Later Life Survey).

It also appears that there is some need to continue to study the constructs contained in this corpus (e.g., resilience, depression, grief) from a cultural lens. This was indicated by Hansen’s study on unexpected deaths (2014), Pyke’s (2019) work with depression, and examined from a more theoretical lens by Miller (2008) in regard to substance use and recovery. This would be part of an effort to bolster the cultural competence of the corpus (which is already impressive) and strengthen how valid and culturally adapted the constructs (resilience, depression, grief) are. It is only appropriate to conceptualize and measure constructs as they appear. On a related note, it may be useful to take such studies as Pyke’s qualitative study and create a more culturally-informed measurement of depression or resilience that includes the interpersonal and somatic presentation of depression that was found in the population. This may increase construct validity. There is also extensive work that remains to either vet or create inventories that properly and appropriately measure the research constructs, and perhaps most importantly, do so without offending research participants (Hansen, 2014).

On another note, related to methods and particularly related to intervention-based research, Shunkamolah (2012) recommended the use of alternative treatments, or a waitlist, with the participants on the waitlist acting as their own controls. Shunkamolah’s study suffered from a small n and rather sizeable attrition. He recommended that researchers help reduce barriers for research participation that participants may encounter, such as a lack of transportation to/from study sites.
There are some areas lacking in the research corpus that can be defined. Many of the studies recommended longitudinal research with resilience-based models. Much of the research was cross-sectional and correlational. It would be an immense effort, although potentially quite informative, to follow a sample of American Indian youth through adulthood into maturity to understand the process of resilience across their lifespan. It may also be interesting to follow up Miller’s (2008) recommendation and incorporate the use of a combined Indigenous/Western model with trauma. This combined model would have potential to conceptualize the recovery process from a more Indigenous perspective.

_Evaluating the Quality of Studies_

These research projects were all completed at the master’s or doctorate level and passed the review of thesis and dissertation committees. As the research continues, standard components and processes should remain regular process of methods and analyses, continuing to ensure the quality of the studies.

It should be noted that the InPsych research lab is one of only a handful of graduate level psychological research labs (as previously noted, one in North Dakota, and another in Oklahoma) that conduct psychological research with Indigenous populations or gather research data with Native participants from reservations and is mentored by a Native PhD. The lab itself is quite a rarity and is producing research that could very well be considered cutting edge.

The research in this corpus was often exploratory. While all research has some aspects of exploratory, and while there is research regarding the more general topics such as resilience, grief, social support, parenting, substance use, depression,
and health disparities, there is very little to no research that examines these in similar ways to the projects of related in this corpus. Regarding exploration and statistics, Belcourt’s dissertation (2006) was very much exploratory, and as Belcourt noted, use of post-hoc analyses risked inflating the potential for type 1 error. Also, arguments could be presented for increasing $p$ value thresholds or effect sizes for ‘significance’ given the nature of exploratory research. Future research could follow Belcourt’s (2006) method of quantitative testing using initial analysis followed by secondary extensive exploratory analyses, and use of her study to guide future exploration into the resilience components she found in her participants, with related methodological considerations.

Some studies’ methodological characteristics may have affected their quality. For instance, Shunkamolah’s (2012) qualitative study employed an “unspecified” qualitative analysis which makes it difficult to critique. Levels of analyses varied as well, from simple statistical analysis – to more complex analysis. For example, Miller’s (2008; linear regression) and Douglas’ (2018; simple linear regression) works employed simpler analyses, while Vaile (2015; multiple hierarchical linear regression, logistic regression) and Hansen (2018; hierarchical binary logistic regression) tested more complex models. However, given that there is not necessarily a strongly established benchmark of quality that has been established for the research regarding analysis, it is difficult to make strong conclusions in this area.

As in all cases of psychological research, there are also general limitations in the conclusions that could be drawn from individual studies because of methodology. The studies were not experimental, for example, so it is impossible to draw conclusions about causality. Likewise, there were no control groups, or treatment designs with wait
lists. Most studies were cross sectional and correlational, with data that were collected at a single point in time. Dr. Shunkamolah’s dissertation (2012), was an exception, as it used repeated measures to study the effects of a grief intervention (pre, post, 1-month post and 3-months post-study). As with cross-sectional designs and even with some longitudinal studies, causality was difficult to determine. At the same time, connections and relationships among variables were defined within the limitations of the study design. There is also limited generalizability due to the specific populations from which data were sampled. For instance, multiple scholars reviewed here noted that it was difficult to generalize the experience of grief from one tribal community to another, although there may have been general factors in common. Also, small sample sizes affected power in certain statistical analyses. The scholars noted these limitations to existing work and recommended that they be considered when designing and planning future studies and analyses.

In addition, as with a lot of psychological research, there may be issues with reproducibility or replicability due to many factors, including small sample sizes, and unique characteristics of particular samples (rural versus urban, one tribe versus mixed or differing tribes, different age ranges/generations, or other unique samples – such as Hansen’s sample of criminal offenders). On replication efforts, new studies may produce subtle differences in results, and perhaps reproducing a study but varying one component of the methodology of participants may allow observation of other findings. These issues once again highlight the importance of building a foundation or corpus of research within particular populations of American Indians. As the body of science grows, so will our understanding of the many facets of resilience in those populations.
Finally, and quite importantly, the scholars whose work was reviewed noted that more often than not, they used inventories or measurements that were not created for or normed with American Indians; however, there were studies that did use measures created for use with American Indians (Belcourt-Ditloff, 2006; Miller, 2008; Croxton, 2015; Fox, 2015; Hansen, 2014 & 2018). Furthermore, four of the quantitative studies either created culturally vetted inventories or used vetted inventories (Shunkamolah, 2012; Miller, 2008; Hansen, 2014 & 2018). The scientists whose work was analyzed urged the development of culturally adapted inventories as a must for culturally appropriate research and intervention. These tools should, at a minimum, avoid offending participants, as was found by Hansen (2014). Culturally-relevant measurement will increase the validity evidence base of the inventories, increase the statistical power of the research design, and facilitate drawing more meaningful and helpful conclusions.

**Discussion**

**Future Research.** Future research efforts should be informed by community-based participatory research (CBPR) principles and Tribally-driven participatory research (CBPR with recognition of tribal sovereignty and corresponding legal and ethical considerations; Mariella, Brown & Carter, 2009), and it should continue to engage in ethical practices to benefit Indigenous people and communities. Research efforts should be built with input from community members, and should be conducted with the permission of community. This would mean establishing or connecting with local Tribal or Native organizations to establish relationships and explore the plausibility and applicability of future community-based research. Research efforts should undergo
thorough review by Tribal Institutional Review Boards. There has been recent research and guidelines developed for what is called Tribally-driven participatory research (Mariella, Brown & Carter, 2009). If the data are derived from a tribal community, that community should store, own, and control the data (Woodbury et al, 2019). There may be need for Native researchers to advocate for this component in the context of research that takes place at a university, but it is necessary. It is important that research results be presented to back to stakeholders through engagement with culture committees and tribal councils. What is important is not only what is researched and who participates. The process of research, including how participants and researchers engage with each other, is important, too.

While not drawn from the narrative review but drawn from the values discussed in the InPsych research lab, the importance of relationship within Native research should be recognized. It is perhaps more important to recognize relationship with Indigenous research (than to hold the idea that a researcher has no relationship to their participants, desire to benefit the communities they are working with) and to recognize and work with potential complications from those relationships. This is based in the book “Research is Ceremony” by Shawn Wilson, and Dr. Swaney’s own belief in reciprocity. Dr. Swaney, as well as the students in the InPsych lab, were and are driven by the obligation and honor to serve Native people as they are Native people; this relationship is not something to be nullified or set aside in the research process (as in Western research ethics). Dr. Swaney once told me a story of how she was placed into an ethical dilemma of whether to help a relative; in the end she chose to help that person. I remember her giving the statement, “If you can’t help your relatives, what good
are you?” It should be seen instead as something helpful. I once heard that one of the highest forms of praise you can give a Navajo person is if they are told that they take good care of their relatives; many Native people see each other (although they may not be from the same family, community, or even tribe) as relatives.

**Statistical and methodological considerations.** Researchers should be attentive to community needs and allow the needs of the community to have an input on the focus of the research projects and consider that when defining the methodology. The InPsych Lab should continue to embrace both qualitative and quantitative methods. Future research projects should continue to use culturally-adapted research methods, including culturally relevant and adapted research instruments and conceptualization of research projects. Based on the successes to date in the InPsych Scholars’ body of work, I would also recommend continued use of resilience-based models and related resilience based exploratory research. The use of qualitative and quantitative methods can inform each other (such as Dr. Swaney's initial qualitative work regarding effective coping, followed by a resilience-based quantitative research effort), and mixed methods. Students could be encouraged to conduct qualitative research and follow up with quantitative research or vice versa.

It may be a formidable undertaking, but another concerted effort could be taken to examine coping in urban American Indians (similar to the Coping in Later Life Survey, or CLLS, which examined coping among rural AIs). Researchers should continue to create and vet inventories and to explore the construct of resilience. Going further, it may be useful to conceive of resilience within the framework of local traditional languages, and epistemologies, but this should be done without misappropriating
culture. This might be achieved through an approach like the medicine wheel that Dr. Miller integrated, the Navajo-based Hózhó resilience model (Kahn-John, 2015), or similar models derived from local Tribal cultures and epistemologies. This writer would love to see the creation of such models of resilience. These are also considerations that could bolster the validity and reliability of research. This would include supporting culturally adapted research methods, such as implementing the previously mentioned considerations for tribally based participatory research, using culturally adapted constructs (such as grief, resilience, depression), and encouraging student researchers to learn about Indigenous research methodologies. Perhaps research models could use resilience both as an outcome measure and potentially as a moderating variable in their designs. Developing tribally based or locally based measures of resilience would likely be beneficial. Perhaps future research could continue to use the CLLS database to explore resilience, although this would have to be negotiated with the community that the data is derived from.

Given that much of the research included in the corpus was exploratory (given the paucity of resilience-based psychological research with American Indians) it may be necessary in quantitative research to make statistical compensations regarding effect sizes. Efforts should also focus on achieving adequate statistical power, which may mean increasing power if possible, or to use a research design that is able to more adequately work with a small sample size. However, this can be difficult with the diversity found among American Indians. For instance, if a research project is working with a small Native community of 2,000 members, and a subset of that population is are eligible for participation in the study, but only one out of three potential participants
complete mailed out research packets with assessments, the statistical power of that research may not be enough to detect significant effects, especially if the assessments are not culturally vetted. This is the “small n” problem faced in research with American Indians, such as related by Shunkamolah (2012) who started with 40 participants (which is low to start off, if one wants to use parametric statistics) and had the power of his quantitative research design reduced by attrition (at one point, only 30% of his participants completed measures). On a related note, having a mixed American Indian and non-AI sample may boost the ability to define factors that affect these groups together in the same way or that act upon them differently, but a larger sample size may be needed to boost power for analyses. Statistical analyses and methods should have sample size in mind and make the best of small sample sizes with considerations for research design and analysis. Researchers may need to identify and work to minimize or overcome barriers research participants may experience, such as difficulty with transportation (as faced by Shunkamolah, 2012).

The studies of the corpus could benefit from replication, or approximate replication such as changing one major aspect of the research (e.g., using a different measure of depression or resilience) in order to isolate and/or further investigate the effects. Elements that could be tweaked include participant variables or communities (rural and reservation, age/generation, gender identity) and other aspects of diversity specific to American Indians (e.g., research with vetted instruments to measure historical trauma) to buttress the generalizability and/or transferability of the research.

Research can aspire to affect policy and should describe relevant implications for praxis. These implications may be on the level of larger systems, such as
recommendations to increase social support for tribal elders, or to shift resources to
decrease the effects of chronic health conditions, or more generally speaking support
tribal health care policies and organizational changes that help increase the resilience of
its tribal members.

There could also be investigation into what the research has to offer for not only
intervention, but prevention as well, such as offered by this author, Croxton (2015), who
suggested tribal elders who are isolated may be at risk for developing depression and
increasing their social support in some kind of way may be a preventative measure.
Another specific example comes from Vaile (2015) who studied the links between
chronic health conditions, sources of resilience, and mental health, found a relatively
large effect of health conditions on symptoms of depression ($R^2$ was .485 for his model).
This result strongly suggests that support for the use of integrated behavioral health
programs in the tribal community, as well as continued efforts to address environmental
stressors that contribute to health disparities, may be effective at helping reduce
depression.

I also believe it would be beneficial to look at the Historical Loss Associated
Symptoms Scale and factors of anger/avoidance and depression/anxiety as they relate
to related variables such as grief, gender, depression/resilience, and substance use.
There maybe limited studies that currently exist outside of the lab although I am not
familiar with any such studies. There may be useful data that could be derived from
such studies that could inform future research efforts and have potential treatment
implications. As an example, one treatment method for substance misuse (The Red
Road to Wellbriety: In the Native American Way CITE) involves pursuing sobriety and recovery by addressing the process and symptoms of historical trauma.

Speaking to the more general research implications of the research lab, behavioral health programs should continue to engage with other health-based departments (e.g., addictions treatment, medical), criminal justice systems (e.g., tribal defenders, tribal jails), as well as parenting programs. Cross service collaboration could provide community events that educate tribal members about mental health and helpful sources of resilience that have been identified. These sources include, but are not limited to, managing chronic health conditions, offering connection to traditional cultural practices and ceremony, education about social support and healthy relationships, or concerning resilience within the process of historical trauma.

**General Considerations**

I imagine one could make two sets of recommendations using the Western and Indigenous sets of epistemologies, axiologies, and ontologies (Wilson, 2008), although that would not serve to create the necessary synthesis needed to benefit future research conducted by the InPsych lab. The recommendations need to work between these two worlds as Native psychologists do; Dr. Swaney was able to do so gracefully. I will not embark upon a critique of these two methodologies. I will fall back on what I learned from Dr. Swaney when conceptualizing an approach to creating these recommendations, which would be better defined as taking Western methodology and culturally adapting it, while deeply valuing both approaches to research and recognizing the strengths and limitations/drawbacks of both. I believe that this in fact will increase the applicability of any potential recommendations.
Additional considerations include implementing a culturally appropriate research process, and also methods, and measures. The aspects of relationship that include trust and equality are essential to research with marginalized populations. Many tribal communities have been the victims of research that was not conducted ethically, with results of pathologizing American Indian culture or offending research participants and/or their communities, or drastically misunderstanding the research participants’ worldviews or experiences (cite). There has been justified and deep mistrust of non-Native government and authority, including research. There should be no assumption that the Western research model is not offensive; Western research may be offensive and threatening to some tribal members. This writer spoke with an elder who reflected on the harm that outside researchers had committed upon his tribal community and was therefore reluctant to support any research. This may be the attitude of those who hold the authority to give or deny permission for research to take place in these communities.

On the other hand, one Tribal elder said, “If we have been researched to death, maybe it's time we started researching ourselves back to life” (Walters et al., 2009, p. 150). Communities may be justifiably guarded and hesitant to participate in research projects. All research, qualitative or quantitative, with American Indian communities should be approached with caution. Establishing relationship and trust with these communities should be seen as a preliminary component of research that continues beyond the end of the research project; individual student researchers should understand they are representatives of the research lab and University and are working within a web of relationships that will continue after the research is completed. Research projects may in fact be shut down during the proposal process, a fact that
may be more likely if inadequate attention is paid on the front end to relationship building and community collaboration. Researchers should assume that research instruments normed and validated with non-Native samples are potentially offensive and potentially invalid/unreliable and/or criteria deficient. The research should recognize and support local tribal history, culture, resilience, and most importantly, it must give back something to the participants and their communities. In sum, the research should be useful to Tribal communities and advance their aims.

It is also recommended that students continue to review key documents that inform ethical approaches to research with American Indian communities, such as the Society of Indian Psychologists’ (SIP) commentary that critiques the APA ethics code, orienting guides such as Guiding Principles for Engaging in Research with Native American Communities, Version 1, or research articles such as Research in American Indian and Alaska Native communities: Navigating the cultural universe of values and process by Norton and Manson (1996). Students may also find it useful to connect with other Native researchers and attend relevant research conferences (such as the annual SIP summer conference).

Perhaps Native psychologists can also advocate on behalf of Native communities concerning such issues as health or mental health disparities or increasing access to mental health care resources. If racism is seen as a public health issue, and if systemic racism can be changed through addressing policy, then psychologists working with Natives have a responsibility to work beyond the level of individuals. Indeed, if possible, it is important to work to influence and inform policy changes that are beneficial to enhancing the well-being of American Indians.
Part 4: Qualitative Study--Interviews with students and colleagues

Introduction

In the United States, 2.9% of the total population is American Indian (National Council on Aging, 2023). In comparison, one out of every 769 licensed clinical psychologists (0.13%) is American Indian (APA, 2022). Given the mental health disparities that American Indians face such as suicide, depression, and substance use (American Psychiatric Association, 2017), along with difficulty accessing care that is effective and culturally competent (Fleming & Ledogar, 2008; Gone & Trimble, 2012), there is a pressing need for for Native psychologists who study resilience and a clear need to train American Indian psychologists for service delivery.

Training American Indian psychologists requires considerable effort over a long period of time. The University of Montana provides a terminal Ph.D. program where students enter with Bachelors degrees, earn a master’s degree, and leave with a doctorate. In order to train competent Native psychologists, additional efforts are required to sharpen both clinical and research skills. This need and investment were recognized by Dr. Swaney, and she made an incredible effort in order to mentor students. In recognition of this work, a qualitative study was enacted to examine how Dr. Swaney’s focus on resilience influenced her colleagues and students, particularly their research and practice with American Indians.

The phenomenological approach was chosen (Giorgi, 1993) as a nod to Dr. Swaney’s previous phenomenological work with grief in American Indians. The
phenomenological approach is based in understanding a participant’s experience, and providing a description of that experience (Guba & Lincoln, 1989).

**Methods**

The goal of the study was to come to understand how Dr. Swaney’s focus on resilience helped shape the work of her students and colleagues with whom she worked closely. As the participants were going to include a small number of students and colleagues, the first number of total interviews expected to reach saturation was 12. Eight students and four colleagues were chosen to be contacted; the students wrote theses and dissertations about resilience, and the chosen colleagues helped conduct resilience-based research. To select colleagues, Dr. Swaney’s curriculum vitae was reviewed, and with the idea that only a small number of individuals would be contacted (12), based on the narrative review that was completed in the previous section.

Qualitative rigor was held to the standard created and outlined by Guba and Lincoln, (1989). They related the four components as credibility, transferability, dependability, and confirmability.

Credibility is related to the construct of internal validity. This was ensured as I read and re-read the interviews, wrote summaries of the interviews, and used NVivo to code the interviews. My coding and process was also checked by a few Native student members of the InPsych research lab. There were a few corrections, consisting of adding a code and revising a few of the themes. This will be mentioned and described further in the results section. Themes were extracted from the interviews.

Transferability is related to the construct of generalizability, or how the findings can be taken and potentially seen as relevant to other populations and settings. This
requires a rich description of the research process, although the focus would be on the participant pool and selection process, which is further defined in the participants section below.

Dependability is related to the construct of reliability. The transparency of the research process makes the research dependable; the research process has been intentionally and clearly defined to make the process clear and to include how decisions were made concerning research design, participant recruitment, and data analysis. NVivo was used to analyze the data and to create the themes, codes, and definition of the codes. I used existing members of the InPsych research lab to reflect on my own process during interviewing in order to ensure that the process was dependable and that I was able to better understand the participants’ experiences.

Confirmability is related to the construct of objectivity. The InPsych research lab participated in coding the interviews and member checks to ensure accuracy and confirmability. The information provided by the coding team verified the structure of the themes and codes, but also provided some feedback concerning the codes. Interviews were recorded and analyzed for codes and themes. Audits were completed using graduate (and an undergraduate) students from the InPsych research lab. Two of the students who audited were also mentored by Dr. Swaney. This allowed an audit while also using the expertise of those within the InPsych research lab, using an “insider’s” perspective for a more accurate and culturally knowledgeable interpretation of the interviews, codes, and themes that emerged. Any differences between coding schemes that emerged were discussed and differences were resolved. There were two key bits of
feedback that were given from the audits that were integrated into the codes because of the process.

**Participants**

The current study included seven participants, four who were former students, and three who were co-researchers or colleagues. Five of the seven interviewees were Native. As far as students and former students, all five were Native and four of the five students had graduated. All had resilience-based theses or dissertations that were chaired or co-chaired by Dr. Swaney. Three of the former students interviewed are currently mental health providers. Of Dr. Swaney's colleagues, two participants were non-Native, and one was Native, and of course all conducted research with Dr. Swaney.

It should be disclosed and noted that the process of recruiting the participants was quite different from recruiting participants from a very large pool of university freshman; the potential participants came from a small pool of individuals that, of course, had relationships with Dr. Swaney as well as myself.

**Recruitment**

Participants were recruited if they had significant experience as a student or colleague of Dr. Swaney, and if they engaged in resilience-based research. Co-researchers and colleagues conducted resilience research with Dr. Swaney. Students were chosen if they had resilience-based theses or dissertations that were chaired or co-chaired by Dr. Swaney. Potential participants were contacted and asked if they would be willing to participate in a qualitative study. They were informed of the nature of the study and were asked if they would like to participate in the study. If they responded that they were interested, they were sent consent forms to review and sign. They were
also asked if they wanted their identity to remain confidential or if they were comfortable with their identity being used in the study. Participants were also told the interviews would be remote and completed over Zoom.

I waited four weeks for replies. I then replied to those who indicated they wanted to participate and waited a maximum of two weeks for scheduling. An initial round of interview invitations was sent to 12 potential participants. Some participants didn’t reply or declined to be interviewed. Six interviews were scheduled and completed. Another round of invitations was sent out to additional participants, with another two interviews scheduled. One participant cancelled. A total of seven interviews were completed. After two rounds of sending out requests to potential participants and collecting seven interviews, it was determined that a third round of requests would be unnecessary, and perhaps even potentially bothersome if participants had previously chosen not to respond to the invitation on the two separate occasions.

**Scheduling**

After confirming their interest to participate in the study, I notified the participants of potential interview times, and they offered their own availability that matched. Interviews were then scheduled and confirmed, and participants were sent a Zoom link for the meeting.

**Procedure**

The informed consent documents were returned with signatures and kept on a protected drive.

**Interviews**
Participants were briefed about the structure of the interview, and that they would indicate to me when they wanted the recording to start and stop. They were also told that there would be a short debriefing afterwards. Participants were asked, "How did Dr. Swaney’s focus on resilience help shape your research, practice, or other work with American Indians?" Interviews lasted between 40 minutes and 1.5 hours. Interview transcripts were de-identified and numbered.

**Analysis**

The interviews were conducted using Zoom, and the audio was transcribed using Zoom as well, which is an automated process within the Zoom program. These transcriptions were reviewed a second time for any remaining errors. The transcripts were initially transcribed by Zoom, and then checked for accuracy and corrected. These were corrected and analyzed using NVivo software (release 1.6.2) by the primary researcher.

Giorgi (1994) defines four major steps of analyzing qualitative data. These steps were generally held to during the process, although the broader approach of thematic analysis (Braun & Clark, 2006; Braun & Clark, 2017) was used as a more general process. Thematic analysis focuses on the process of identifying patterns within qualitative data and developing codes and themes based on those patterns.

First among Giorgi’s (1994) steps is developing a “sense of the whole” (p. 10). Consistent with this guidance, interviews were read in full, and then re-read. As the interview transcripts were reviewed, the audio was replayed to ensure accuracy, which further increased the representation of the interviews. The information conveyed in the
interviews was examined for any or key responses or elements that related back to the interview question.

The second step in Giorgi’s (1994) model is “discrimination of meaning units with a psychological perspective focused on the phenomenon being researched” (p. 11). In this step, responses were examined for patterns and codes were developed based on the content of the interviews.

Third is the “transformation of subject’s everyday expressions into psychological language with emphasis on the phenomenon being investigated” (Giorgi, 1994, p. 17). Codes drawn from individual interviews which reflected ‘meaning units’ were then compared to similar codes from other interviews. Descriptors of those codes were then narrowed or broadened to fit all the quotes that were considered together. Some of these codes appeared more frequently in single interviews, while other codes were applied more regularly across multiple interviews. The “transformation” process involved defining and refining higher-order codes, which involved changing the definitions of the codes as the content of the interviews was analyzed. These changes in turn sometimes meant changing the definition of codes to make related codes not overlap but still fit together, so there was distinction between the codes. These codes were then in turn examined to see how they best grouped together, which generated a higher order structure consisting of themes.

Giorgi’s (1994) fourth step requires the “synthesis of transformed meaning units into a consistent statement of the structure of learning” (p. 19). These codes were then taken and examined for relationship to each other and grouped together, and themes were developed. For the present project, this component was informed by the process
of thematic analysis described by Braun and Clark (2006 & 2017). The more general and specific levels of the “structure of learning” were defined by the layers of themes (more general structure), codes, and definitions of the codes (more specific structure). The process of developing the codes was iterative. Specifically, as codes were developed and refined and taken together into themes, some codes were adjusted, and themes were adjusted as both the differing levels of finer grained examination (codes) and broader analysis (themes) became clear. The codes and themes were checked by a few members of the InPsych research lab. There was one code of “Going above and beyond” that one team member suggested, although this writer found it difficult to find specific quotes that mentioned Dr. Swaney as doing more than was asked; although she was generous with her time and was supportive, I believe this idea was reflected throughout the other codes. Another correction was to add colleagues (and not just students) as those that she directly mentored. This thought was added into the theme of the direct mentoring.

There was a point at the sixth interview when saturation became a consideration. Seven total interviews were conducted, four students and three colleagues. Data saturation was reached with the sixth interview and was confirmed by a seventh interview (Saunders et al., 2017, Guest et al., 2006). No additional themes emerged after the sixth and seventh interview were analyzed. Additionally, the subject pool for potential candidates was extremely small, and as I had previously attempted to recruit some potential candidates and attempted contact twice, given saturation and a lack of potential participants that recruitment would end.

Results
The question “How did Dr. Swaney’s focus on resilience help shape your research, practice, or other work with American Indians?” elicited memories of Dr. Swaney, including stories of establishing a relationship with her, the experience of working with Dr. Swaney, her notable characteristics, and how Dr. Swaney influenced their immediate work. Interviewees also noted Dr. Swaney’s influence on how they approached research and clinical work, her influence on their future work and efforts, and how her mentoring changed participants themselves.
<table>
<thead>
<tr>
<th>Theme</th>
<th>Code</th>
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<tbody>
<tr>
<td>Advocating for research participants and community: Acknowledging resilience in the community and in research participants, choosing to look beyond pathology</td>
<td></td>
</tr>
<tr>
<td>Direct Mentoring: Investment in and support of students and colleagues</td>
<td>Fostering resilience: empowering students and colleagues with strength</td>
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<tr>
<td></td>
<td>Support of professional development and identity: fostering growth in students related to being a native psychologist</td>
</tr>
<tr>
<td></td>
<td>Change of student perceptions of psychology: Gyda’s influencing students to change perspectives on pathology/resilience, including encouraging adoption resilience-based approach to research and therapy</td>
</tr>
<tr>
<td></td>
<td>Influence on continued professional work: students and colleagues continuing to learn and use what Gyda had shown them/and or carry on the influence of her teaching</td>
</tr>
<tr>
<td></td>
<td>Personal growth of students</td>
</tr>
<tr>
<td>Assistance and Guidance for other scientists (students/colleagues): providing task related support: such as helping with guidance with tribal council</td>
<td>Connecting others to community: connecting colleagues/students to the Flathead reservation</td>
</tr>
<tr>
<td>Characteristics: Values</td>
<td>Compassion: treating others with kindness and respect</td>
</tr>
<tr>
<td></td>
<td>Generosity/reciprocity: giving back to others including individuals and community</td>
</tr>
<tr>
<td></td>
<td>Showing resilience: showing the ability to bounce back</td>
</tr>
<tr>
<td></td>
<td>Importance of relationship: placing importance on obligations to connect with and help others</td>
</tr>
</tbody>
</table>
Themes and Codes

Theme: Advocating for research participants and community: Acknowledging resilience in the community and in research participants; choosing to look beyond pathology

The participants identified that Dr. Swaney recognized resilience in research participants and their communities and maintained a focus on those strengths in her research.

Participant 4 discussed advocating for community-based participatory research and supporting a strength-based research perspective: “Not only advocating for that, but then also advocating for like working with the population and then also just advocating for the fact that as Native people, we shouldn’t be focusing so heavily on what’s wrong; we should be focusing on what we’re doing right.” This quote shows that Dr. Swaney was active in her effort to focus on resilience and helped guide students into resilience-based research projects of their own.

Participant 3 talked about how Dr. Swaney saw resilience in community and participants, but also through a cultural lens:

“…She not only believed in in looking at resiliency from, especially from a Tribal perspective, you know she did some work, I think, with elders yeah in a project with elders in regard to resiliency. But just um. Seeing the good in people.”

Participant 3 reveals how Dr. Swaney not only focused on resilience but used a culturally informed perspective when working with Natives, and that more broadly, she saw the good in people.
Theme: Assistance and Guidance for other scientists (students/colleagues):

**providing task-related support: such as helping with guidance with tribal council**

Participants described how Dr. Swaney helped connect them to American Indian communities and organizations, as well as providing practical support on grants.

**Code: Connecting others to community; connecting colleagues/students to the Flathead reservation.** Participant 6 described being connected to an American Indian community and identifying this community as resilient:

“The big thing was Gyda was very much inroads into Indian Country you know, specifically working with the Flathead people and… yeah that’s a big part of it, so I mean this is a little off, but you know. Setting me on the path to work with, really, resilient group of people as a population in the clinic.”

This quote shows how Dr. Swaney provided connections to her own community, providing students with the ability to work with a resilient Native population.

Participant 7 described that Dr. Swaney provided key assistance with grant writing, and connecting with American Indian organizations:

“I think Gyda and I began collaborating… she served essentially as a cultural consultant on the grants that I was working on and just in terms of contribution, I mean honestly I don’t think I could have done the work without her and that’s the bottom line. That she was instrumental in helping collaborating… working with me to navigate something that by myself would just have been lost in like, for example. Making connections in the community with that particular project to to reach out to the Missoula the Indian Center at the time and try to recruit through them. And so you know we did that so she was able to foster
those connections that enabled us to kind of like publicize and get hooked up with people who are willing to talk to us about their lived experiences.”

This quote clearly shows how Dr. Swaney was able to assist and facilitate work between colleagues and the local Native community and organizations.

**Code: Helping to guide and conceptualize research; providing a resilience-based perspective for research.** Participant 7 described previously using a resilience-based framework for research, but that this was guided and broadened by Dr. Swaney:

“You know, in terms of the work with Gyda, I’ve sort of been brought around or was brought around to sort of this, okay, yes, but also communal mastery, the Community sense of control. That itself [is] a protective resource or a factor, so I guess I’m just trying to explain like how I feel like her contribution helped broaden the lens of my thinking was resilience and conceptualizing it…”

This quote reflected the participant’s shift in conceptualization of mastery, helping them understand it more accurately from the Native relational perspective.

Participant 4 described how Dr. Swaney helped guide her to adopt a resilience-based framework for a research project:

“And then she proceeded to tell me this one story of how she met with some kind of some elder, I think. I don’t know who or where they were from, but she said she was talking to me about like her, doing community-based participatory research, and how she went and talked to the Elder and elder was like ‘we know what’s wrong. We know what’s wrong with this Community, but we don’t know what we’re doing right or what can we do to fix this’, and that one story really like kind of stuck with me because of the fact that she… she was
telling me in an indirect way to focus on the strength-based approach of Native Americans and resiliency as a whole. And from there, she really pushed me to kind of focus more on resiliency and strength-based research.”

Through storytelling of her personal experience, Dr. Swaney gently directed students, and instilled in others the value of resilience-based research perspectives.

**Theme: Characteristics and Values**

**Code: Compassion: treating others with kindness and respect.** Participant 3 described that Dr. Swaney was compassionate: “You know, Gyda was a wonderful friend, she was... I learned a lot from her. Just compassionate. And she um, she volunteered a lot.” Participant 3 later elaborated on how Dr. Swaney was compassionate in her support of students and brought how she welcomed them into her work and research program: “How compassionate she was in how her thinking… it was to involve students in every bit of all along the way. Not just students from her class, but other students as well.” These quotes show how Dr. Swaney was compassionate, and how she was kind in her work with students – even students that were not her own.

**Code: Generosity/reciprocity: giving back to others, including individuals and community.** Participant 3 described how Dr. Swaney would give back to the communities with which she worked:

> “And I thought joining in the community, and and she told me, and like when you go anywhere, and and you’re in someone’s community, always bring a gift or buy buy something there. If you’re ready to college, go to their bookstore and spend, you know, spend money. Give back to the community; reciprocity.”
Participant 5 described how Dr. Swaney changed her conception of the relationship between researchers and participants:

“And the reciprocity that is inherent in our work, and again, up to that moment, I had thought about research as extracting, right? And and not that it was a sharing of knowledge, that that this relationship is not... it’s not... in a vacuum. Or this phenomenon is not in a vacuum. It happens in relation, relationship with others. And I think that broke this view or this belief I had about research that it was an extraction, right? And that I was able to extend my clinical values and working with patients and clients to research in the same way that we are essentially. The goal is to create a relationship and to share knowledge…”

This observation highlighted the importance of researchers’ engagement as invested collaborators with the communities in which they worked. This idea differs from the notion of disinterested scientists who remain on the sidelines as research processes and findings unfold.

**Code: Showing resilience: showing the ability to bounce back.** Participant 2 described how Dr. Swaney herself demonstrated resilience: “And that was Gyda. Living... I don’t even want to say ‘modeling’; I want to say living resilience.” Participant 3 echoed this observation of Dr. Swaney’s resilience: “So, even without talking about resiliency, she, she modeled resiliency as well.” This clearly shows how Dr. Swaney was a resilient colleague and mentor; and that her beliefs and values were in line with her actions.

**Code: Importance of relationship: placing importance on obligations to connect with and help others.** Several interviews contained themes that highlighted
the importance of relationships. Participant 5 described specifically how her conception of research was changed to focus on relationships:

“The research wasn’t just resilience focus, it was also focused in relationships and the reciprocity that is inherent in our work. And again, up to that moment, I had thought about research as extracting, right, and and not that it was a sharing of knowledge, that that this relationship is not… it’s not in a vacuum, or this phenomenon is not in a vacuum. It happens in… relationship with others. And I think that broke this view or this belief I had about research that it was an extraction, right, and that I was able to extend my clinical values and working with patients and clients to research in the same way that we are essentially. The goal is to create a relationship and to share knowledge, and I think that’s the same goal… when you’re doing therapy, because you don’t often know the end goal for your client. You’re sort of in relationship with them, helping them discover, you know, or not just helping them, you’re both sort of discovering. Kind of peeling back layers, and that’s the way that I see research now… is that we’re sort of peeling back layers and understanding it through our our relations.”

This quote shows how Dr. Swaney worked to emphasize the importance of relationship in professional work, and that this had a profound effect on students.

Participant 2 described how Dr. Swaney placed a heavy value on relationship as well as wanting to give back to the community, as one student wanted to:

“Because it really embodies what she was teaching us. And it was research is spiritual, spiritual like a contract or something like this. And that may
have been what it was, but in that we developed a model, and it involved relationship, respect, and reciprocity. And see, and I hear with [name] that reciprocity... that this is going to affect this. Research will help the community. So, and relationship, as I’ve read more about research with Native people, reciprocity is really important, your relationship is really important. Research is relationship.”

With these themes and the quotes that reflect them, the participants restated the importance of relational research practices and the necessity that the work directly benefit the people with whom it’s done.

**Theme: Direct Mentoring: Investment in and support of students and colleagues**

Dr. Swaney supported both her colleagues and students, encouraging them to be resilient through modeling resilience, and also spent considerable effort in supporting their research projects. She also encouraged one of her colleagues to mentor Native students, which could have been an effort to both benefit the colleague as well as students.

**Code: Fostering resilience: empowering students and colleagues with strength.** Participant 6 provided a descriptive quote that highlighted how Dr. Swaney promoted resilience in her students and other collaborators: “Because she again was teaching us resilience, you know, not just as an academic pursuit or abstract idea, but was really there to... ‘gonna... make you stronger and hardy before I send you back to the reservation, so you know.” Dr. Swaney believed it was her responsibility to work with students to build their inner stores of strength and resilience so that they were prepared for careers that would help instill resilience in others. This notion was also highlighted by
Participant 6 who described learning resilience: “it’s one thing for people to tell you you’re resilient; it’s another thing for someone to show you you’re resilient. And that was Gyda.” Finally, Participant 1 described how Dr. Swaney’s mentoring style allowed her to show her own resilience: “believing in me… and even though, like, her area expertise wasn’t kids or, like, teen parents, she allowed me to have a voice in my research, and, like, show the resiliency in me.”

**Code: Support of professional development and Identity; fostering growth in students related to being a native psychologist.** Participant 1 described how Dr. Swaney helped them embrace their identities and find balance while living in multiple worlds:

“I think Gyda did a really great job of helping me personally find a balance between, like, a Western academics and then my role as a Blackfeet woman. And being able to embrace both, and work toward blending both in a way that will be, you know, ethical on the psychology side, but then also ethical for my community. Kind of like you said, like what’s the… what are we good for if we can’t help our own relatives. So she did… I feel like she helped, helped me embrace my identity, a little bit more than I think if I were with… had a different advisor. It would have been a lot different.”

This shows how Dr. Swaney helped students to develop into Native psychologists, which is a multifaceted and nuanced task.

Participant 5 described how Dr. Swaney’s mentoring helped her feel comfortable as a psychologist: “and I think, had it not been for Gyda in her kind of consistent focus on decolonizing psychology… that I don’t think I would have… I don’t think I would have
thrived in a place that that felt like it wasn’t for me. So it was really the thing, the program that she cultivated the other Native students, the space that she created for native students to be in is what helped me feel like I had a place in in this field.” This shows how Dr. Swaney worked to create space for Native students, in a way that allowed them to be comfortable in a non-Native profession.

**Code: Change of student perceptions of psychology: Dr. Swaney’s influence on students to change perspectives on pathology/resilience, including encouraging the adoption of resilience-based approach to research and therapy.**

Several participants reflected on Dr. Swaney’s influence on how they understood the broader field of professional psychology. Participant 5 described how Dr. Swaney changed her perceptions of research and its broad effect on them as a researcher, clinician, and person in general:

“The way that she thought about and then sort of shaped us to think about resilience as as a strength-based kind of perspective, it sort of made me realize that the field of psychology--well I guess it highlighted that the field of psychology had a, you know, previously been using the deficit model. And, again, I think that was… unquestioned for me up to that point. So she really shifted the way that I thought about pretty much everything the scientific world or the Western scientific world, because I hadn’t - I hadn’t questioned it to that to that moment, right? I just sort of accepted things as fact. And so to focus on resilience, seems it… seems kind of common sense now to me, but it leaves out this, the fact that the … field had not focused… had not included resilience. It, it was leaving out part of the the truth, right? What is, there is also resilience, and so it not only shifted the way
that I think about myself as a researcher, as a clinician, as a person, but it made me think about sort of the larger narrative and what has been written in the Western world about American Indian, you know, Alaska Native, Native people, Indigenous people as a whole, I guess.”

This shows how Dr. Swaney influenced students and colleagues in how they thought about Natives, and resilience.

In a particularly informative quote, participant 6 described how being mentored by Dr. Swaney was deeply changing in multiple ways that affected their life:

“I think, if anything, I just... I just want to emphasize how much of a transformative experience it was only through her as that channel if that makes sense. I mean any other supervisor I don’t think would have had the same impact, I mean good, but Gyda was one of a kind and different. And again, you know, I think it was just this lens from which to view the world that she... that was the ultimate tool she gave me and that is that resilience.”

This shows how Dr. Swaney’s influence had both breadth and depth; this student described the experience as vastly changing, and that she gave them the “ultimate tool” of resilience.

**Code: Influence on continued professional work: students and colleagues continuing to learn and use what Gyda had shown them/and or carry on the influence of her teaching.** Participant 5 described carrying the effect of Dr. Swaney’s mentoring forward:
“You know when I think about it in terms of your impact that - You know that, creating a space means it has that kind of trajectory effect where each of us then go out into the world and and... essentially, carry that impact forward, yeah.”

In a similar vein, participant 6 described that due to feeling grateful for Dr. Swaney’s mentoring, he felt a need to do good work as a psychologist: “Just a sense of obligation to do good and [to] let Gyda shine through you.” These quotes show how the relationship had lasting effect, that although Dr. Swaney is gone, her influence will carry forward through her students and colleagues.

**Code: Personal growth of students.** Participant 1 shared how Dr. Swaney allowed them to grow and change how they perceived themselves as a Native person:

“...So I reached out to Gyda and thought and try to apply to the University of Montana, and so I did that and. To my surprise, I got in, and that was sort of the start of my reinventing myself. So. graduate school was... How I think about it was that it opened my eyes to it was, [it’s a] reflective process right, and it opened my eyes to who I was and [how I] positioned myself in a world that I had never thought about before.”

This student shared how formative the graduate school experience was, and that Dr. Swaney was a key person in the process of them “reinventing” themselves.

Participant 6 described the professional and personal effect that Dr. Swaney’s influence had on them:

“This woman had invested so much time and effort and energy into me. And I wasn’t just a means to an end of creating a psychologist. It was our relationship and our work together and all that was a mean and an end in and of
itself. You know that… there was some sacred about training under her. It wasn’t just like I said the sterile thing it was. It was respectful and had appropriate boundaries, and it was just good and a great place to grow and learn, and you know. Keep transforming.”

The words “sacred” and “transforming” used in this quote demonstrate just how powerful and extraordinary the relationship with Dr. Swaney was.

In summary, Dr. Swaney provided essential support for research with colleagues, as well as her knowledge of American Indian organizations, connecting her colleagues to those organizations through her own relationship with them, and providing essential knowledge of how to navigate the logistics and steps of research projects. She was kind, generous, resilient, and prioritized keeping in good relationship with others. Likewise, she felt a core obligation to serve and help Native communities and students. She helped those around her be resilient; she empowered students, helped them grow into competent Native psychologists, changed students and colleagues’ perceptions of research with American Indians. In collaboration with her students, she also helped shape others’ understanding of professional psychology, broadening its focus beyond pathology, urging the field to understand and support strengths above all. She still has a continued influence on those she mentored today, and through the work of the students and colleagues she mentored; her values, generosity, resilience, and confidence in her students’ lives on through the work they continue to do.

**Discussion**

The study investigated how Dr. Swaney’s focus on resilience helped shape the research, practice, and other work of her colleagues and students when working with
American Indians. It is perhaps interesting to report that while the central question of the interview was an inquiry into how Dr. Swaney’s influenced them, many of the participants described her characteristics that often related to relationship and resilience. They also answered what her focus on resilience meant for colleagues, students, and the individuals and communities she worked with when conducting research. Of course, participants also answered the inquiry, describing how her focus on resilience affected their research, clinical, and other work with American Indians.

Participants described Dr. Swaney with many positive characteristics through stories they shared. They also described the effect that she had on their professional work and the effect that she had on them personally. The qualitative interviews confirmed that she believed in reciprocity, saw “the good in people,” was “a guiding light” (Participant 3). Interviewees also commented on how she believed in the ability of people to be resilient. Dr. Swaney’s mentoring changed how students viewed the field of psychology, including research and clinical work. Her mentoring even changed how students saw themselves, as her support and belief in their resilience encouraged them to endure and allowed them to succeed through the many challenges of graduate school. She influenced them to continue using a resilience-based framework after graduating and into their professional work.

Consistent with the themes of reciprocity and giving back, students described an obligation to mentor and/or supervise other students or psychologists-in-training in the same manner she did. This desire is to perhaps “pay forward” Dr. Swaney’s investment in those students and reflects the fact that her investments in individual students contributed to the collective community of Native psychologists. She also instilled the
obligation to serve Native Americans. On a personal note, this value was instilled in me during my experience at the InPsych Summer Program, even before I started graduate school. As Dr. Swaney’s students mentor other Native students or psychologists-in-training, then her efforts contribute to a sustainable model for continuing to grow future generations of interconnected Native psychologists. Each of these psychologists, even if distant from Dr. Swaney in time or space, would have the opportunity to learn from her.

Dr. Swaney acknowledged the difficulties and challenges that Native Americans have faced historically and continue to face. At the same time, she saw the strengths of the people and the communities she worked with while conducting research. Results of the qualitative interviews of her students and colleagues confirmed that her guidance helped them understand this fuller picture, one that included and emphasized strengths alongside challenges. While Dr. Swaney collaborated with Dr. Wallace, who had already established a research project based in resilience, Dr. Swaney’s cultural expertise helped tailor the research to be culturally relevant and allowed the research to accommodate Native specific perspectives on resilience. This was reflected in interviewees’ comments that resilience occurs on broader levels than that of the individual (e.g., communal or community-based resilience), and that resilience can have a unique appearance (such as in the context of ongoing historical trauma and historical resilience, or the cultural concept of resilience itself). In sum, Dr. Swaney’s expertise and mentoring allowed for a more accurate conceptualization and depiction of resilience in the participants and communities she worked with while conducting research. As interviewees remarked, this perception worked to de-pathologize the mental health of
American Indians and give them a sense of dignity and respect. As a personal reflection from my perspective as an InPsych Scholar, I also believe her focus on resilience helped to instill hope.

Colleagues and students who completed interviews described Dr. Swaney as playing an essential role in aiding with their research efforts, including providing connection to tribal communities, organizations, and individuals, helping to navigate the research process and establish foundational relationships within those communities, and providing a resilience-based perspective for research projects with colleagues and students. She both connected with people and connected people with each other. One interviewee, a student, described feeling grateful for being connected to and being able to work with a resilient group of people through Dr. Swaney. Her efforts to help guide research projects moved students along their academic paths. It resulted in culturally competent researchers with the abilities conduct ethical and responsible research with American Indian communities, a complex process to navigate, one that is even more hazardous without proper guiding principles. The interviewees described this training and experience in cultural competence as incredibly valuable and essential. Dr. Swaney’s efforts created change within the current projects students and colleagues were developing and influenced the future work of the colleagues and students she was in relationship with; I will discuss this further below.

Perhaps related to her ability to see strength in others, the open-ended interviews made clear that Dr. Swaney treated others respectfully. Three InPsych scholars spoke of her gentle strength, highlighting her tendency to subtly re-direct students to change their thoughts about research (to a more resilience-based model) or
re-invigorate their efforts to continue in the program. As one colleague of Dr. Swaney’s stated, she [saw] “the good in people” and mentored and conducted research this way. She was also resilient herself, as two of her colleagues stated, and showed her clients, research participants, colleagues, and students how to be resilient through being resilient herself. Interviewees confirmed that Dr. Swaney made resilience a personal thing, modeling this strength and being resilient, and in doing so, helping her students and colleagues be resilient through her mentoring. Her focus on resilience is also related to how she mentored students through their journey in school; graduate school is challenging, and being Native within a western institution is another layer of difficulty. Walking in the two worlds of the Indigenous and Western is difficult; Dr. Swaney did this gracefully and modeled that for students and guided and supported Native students in their professional development. She created a space for Native students to bring their own identities as Native people into the roles of researchers and clinicians.

The qualitative interviews documented Dr. Swaney’s work to decolonize the academic and scholarly space and to make students comfortable. This supported students’ development into culturally competent psychologists. Decolonizing the space often meant changing views of student researchers concerning work with Natives, placing emphasis on the fact that relationship and reciprocity are important. Mentoring this way likely felt natural for her because she had such kindness and respect. She brought these qualities into her approach with working with students, colleagues and conducting research.

The qualitative analysis confirmed that Dr. Swaney’s colleagues were influenced similarly by her focus on resilience. They also reported a broadening of their conception
of resilience, which they asserted would continue to shape their future work. Students spoke of a maternal influence in that she nurtured and grew Native students and transformed them into psychologists-in-training that could, in turn, go on to supervise, train, and mentor other Native psychologists. This continued and self-perpetuating outcome of her mentoring adds a special and powerful medicine to her legacy. As a personal note, I am proud to claim her in my academic lineage.

In summary, analysis of the qualitative interviews confirmed that Dr. Gyda Swaney believed in the power of resilience and was resilient herself. She taught others how to see resilience in others and shared the magic of resilience through her multiple relationships with them. It is in this way that her legacy will continue to live on.

**Limitations and future recommendations**

There are some limitations to the qualitative analyses concerning transferability. The study was not meant to be a broad or general examination; it was meant to be a very specific and focused question. The resulting data were very specific to Dr. Swaney’s contributions to resilience research and conceptualization and may not be directly transferable to conceptions put forth by others. At the same time, as a Native scientist-practitioner herself, the general findings related to Dr. Swaney may help inform the efforts of others who aspire to mentor other Native psychologists. Future research may be warranted to examine the continued effect of her mentoring and influence on her colleagues and students or a follow up study on students who have chosen to enter academia and have in turn mentored their own students.
General Discussion

The four major sections of this dissertation (the memorial tribute, the literature review, narrative review, and qualitative study) were all part of an effort to frame and examine the academic work of Dr. Gyda Swaney, relate the context and appearance of resilience of American Indians, analyze the research she helped guide, and to identify how she influenced her colleagues and students. The work that she completed, her approach to that work, and the relationships that she had with colleagues and students demonstrate that she was a rare individual who fostered resilience within the many lives she touched.

The memorial tribute introduced Dr. Swaney and allowed readers to get a look at her education, professional work, academic work, and some of the many roles that she had. She was able to positively affect the lives of many people through multiple roles as a clinician, supervisor, mentor, and leader.

Within the literature review, the complexities and facets of stress, coping, and resilience were explained broadly and within the specific context and experiences of American Indians. While the field of psychology is attempting to better understand resilience in the diverse population of American Indians, resilience-based research is growing. The same is true for the understanding of the ongoing process of stress and resilience that has occurred through history and the process of colonization. Many contributing factors were identified among the domains of social support, physical health, mental health, and culture.

In the narrative review, the resilience-based research of the InPsych lab was introduced and examined. The research was evaluated and briefly critiqued;
recommendations were made that related to bolstering the effort for Native-driven and community relevant research, development of culturally sensitive measures, and for ethical research processes and practices that support Native communities. Recommendations for future research were made, as well as implications for treatment and policy.

In relationship with others, Dr. Swaney helped to create resilience in those around her. In her position as a professor at the University of Montana, she helped colleagues understand resilience in American Indians, and helped to guide and formulate research. In her mentoring and research with students, she helped to develop Native American psychologists, foster resilience in those students, and helped these students, in turn, to see resilience in others and foster resilience in others. Wilson (2008) described research as ceremony. Perhaps the same can be said about mentoring.

I am not aware of any specific Native mentoring model. In considering Dr. Swaney’s approach, however, I am reminded of Maslow’s hierarchy of needs (Maslow, 1954) and how Maslow was inspired to create the model after spending time with the Blackfeet (Stone Brown, 2007). Karen Lincoln Michel (2014) presents the Blackfeet model of actualization. This model begins with self-actualization, continues onto community actualization, and, at the culmination, consists of cultural perpetuity. Through a focus on community (the InPsych research lab) and having a relatively large number of Native mentees, Dr. Swaney enabled a small but supportive group of students to develop. I also believe that through her mentoring, and based on the results of the qualitative interviews, that the way she mentored instilled such values as
reciprocity, respect, relationship, and obligation/duty. This resulted in growing Native psychologists who could then go on to continue to transmit and enculturate other psychologists-in-training into the same microculture of resilience-based mentoring. Growing Native resilience-focused Native psychologists helped ensure cultural perpetuity.

This is why I have titled this dissertation “Sharing the medicine of resilience.” Dr. Swaney shared medicine. In turn, I am sharing Dr. Swaney’s academic story, and students are now sharing that same medicine. Dr. Swaney was an amazing Native professor of psychology who was resilient, saw resilience in others, helped others to be resilient, and mentored resilience in her students. She created a circle of strength, and in this way, her legacy lives on through her students and through the many lives that she touched.

**Conclusion**

It is my hope that I have shed some light on the life and accomplishments of Dr. Swaney and highlighted her contributions to the science of Native resiliencies. I hope that readers of this dissertation take away an understanding of who she was a person and professor, as well as an appreciation for contributions she helped make to the field of resilience-based research within American Indians. Finally, I hope readers learned about the incredible influence she had on the work and lives of her colleagues and students.

**Implications**

As the results presented above indicate, the power of relationship can be transformative and is central to resilience in American Indians. This dissertation may
provide insight into the processes of conducting resilience-based research with Indigenous communities and people as well as mentoring Native psychologists.

**Future directions**

While it is my hope that the field of resilience-based research continues to grow and develop, I do hope that the same principles that Dr. Swaney modeled will continue to be a part of the research and academic fields of psychology. It may be necessary to continue to decolonize the field so that there is a space for Native psychologists to continue to develop within.
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Appendix A: Included Studies


Figure 1
Resource Identification and screening process

Identification

Resources Identified (potential resources included the total body of Dr. Swaney’s work and InPsych projects)

Screening

Resources screened (graduate student projects included)

Resources excluded (presentations, posters, talks, non-graduate student work)

Eligibility

Resource abstracts assessed for eligibility (n=28)

Resources excluded (n=15) (i) studies did not include a resilience theme

Included

Resources included (n=13)
<table>
<thead>
<tr>
<th>Theme</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocating for research participants and community: Acknowledging</td>
<td>Connecting others to community: connecting colleagues/students to the</td>
</tr>
<tr>
<td>resilience in the community and in research participants, choosing</td>
<td>Flathead reservation</td>
</tr>
<tr>
<td>to look beyond pathology</td>
<td>Helping to guide and conceptualize research: providing a resilience-</td>
</tr>
<tr>
<td></td>
<td>based perspective for research</td>
</tr>
<tr>
<td>Assistance and Guidance for other scientists (students/colleagues):</td>
<td>IMPORTANT OF RELATIONSHIP: placing importance on obligations to</td>
</tr>
<tr>
<td>providing task related support: such as helping with guidance with</td>
<td>connect with and help others</td>
</tr>
<tr>
<td>tribal council</td>
<td></td>
</tr>
<tr>
<td>Characteristics: Values</td>
<td>Compassion: treating others with kindness and respect</td>
</tr>
<tr>
<td></td>
<td>Generosity/reciprocity: giving back to others including individuals</td>
</tr>
<tr>
<td></td>
<td>and community</td>
</tr>
<tr>
<td></td>
<td>Showing resilience: showing the ability to bounce back</td>
</tr>
<tr>
<td></td>
<td>Importance of relationship: placing importance on obligations to</td>
</tr>
<tr>
<td></td>
<td>connect with and help others</td>
</tr>
<tr>
<td>Direct Mentoring: Investment in and support of students and colleagues</td>
<td>Fostering resilience: empowering students and colleagues with strength</td>
</tr>
<tr>
<td></td>
<td>Support of professional development and identity: fostering growth in</td>
</tr>
<tr>
<td></td>
<td>students related to being a native psychologist</td>
</tr>
<tr>
<td></td>
<td>Change of student perceptions of psychology: Gyda's influencing</td>
</tr>
<tr>
<td></td>
<td>students to change perspectives on pathology/resilience, including</td>
</tr>
<tr>
<td></td>
<td>encouraging adoption resilience-based approach to research and</td>
</tr>
<tr>
<td></td>
<td>therapy</td>
</tr>
<tr>
<td></td>
<td>Influence on continued professional work: students and colleagues</td>
</tr>
<tr>
<td></td>
<td>continuing to learn and use what Gyda had shown them/and or carry</td>
</tr>
<tr>
<td></td>
<td>on the influence of her teaching</td>
</tr>
<tr>
<td></td>
<td>Personal growth of students</td>
</tr>
<tr>
<td>Student</td>
<td>Year</td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
</tr>
<tr>
<td>Shunkamolah thesis</td>
<td>2009</td>
</tr>
<tr>
<td>Douglas thesis</td>
<td>2013</td>
</tr>
<tr>
<td>Pyke thesis</td>
<td>2015</td>
</tr>
<tr>
<td>Bakosur dissertation</td>
<td>2006</td>
</tr>
<tr>
<td>Miller dissertation</td>
<td>2008</td>
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<tr>
<td>Shunkamolah dissertation</td>
<td>2013</td>
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<tr>
<td>Bakosur thesis</td>
<td>2008</td>
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<td>Hansen thesis</td>
<td>2014</td>
</tr>
<tr>
<td>Vaile thesis</td>
<td>2015</td>
</tr>
<tr>
<td>Gordan thesis</td>
<td>2015</td>
</tr>
<tr>
<td>Pierre-foe thesis</td>
<td>2015</td>
</tr>
<tr>
<td>Douglas dissertation</td>
<td>2018</td>
</tr>
<tr>
<td>Hansen dissertation</td>
<td>2018</td>
</tr>
<tr>
<td>Student</td>
<td>Inquiry</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Shunkamolah thesis</td>
<td>The study investigated coping with the death of a family member in a sample of 12 American Indian adults living in or near Missoula, MT who experienced the death of a family member within a 1–5 year time period.</td>
</tr>
<tr>
<td>Douglas thesis</td>
<td>She conducted a qualitative study to better understand the lived experience of American Indian Ikes, based on Giorgi’s Phenomenological method.</td>
</tr>
<tr>
<td>Pyke thesis</td>
<td>Her study was qualitative and used grounded theory to investigate depressive symptoms and protective factors against depression in a sample of 11 older American Indian adults.</td>
</tr>
<tr>
<td>Bekourt dissertation</td>
<td>The study was an investigation into culturally relevant factors that either contributed to to wellness psychopathology in a sample of American Indians.</td>
</tr>
<tr>
<td>Miller dissertation</td>
<td>The study investigated how American Indians who were in recovery from substance use viewed their process of recovery and what factors were supportive or challenging.</td>
</tr>
<tr>
<td>Shunkamolah dissertation</td>
<td>This dissertation consisted of the construction and implementation of a culturally adapted grief retreat designed to address the symptoms of historical trauma in a sample of American Indians.</td>
</tr>
<tr>
<td>Bekourt thesis</td>
<td>The study investigated how American Indians who were in recovery from substance use viewed their process of recovery and what factors were supportive or challenging.</td>
</tr>
<tr>
<td>Hansen thesis</td>
<td>The study was an examination of spiritual practices as a source of resilience within the relationship of unexpected deaths and grief.</td>
</tr>
<tr>
<td>Valle thesis</td>
<td>Examination of health and community related factors that contributed to the presence of (symptomatic) or lack of depression (asymptomatic) in these two groups.</td>
</tr>
<tr>
<td>Croxton thesis</td>
<td>Study the moderating effect of social support on the relationship between historical trauma and resilience.</td>
</tr>
<tr>
<td>Pierre-Fox thesis</td>
<td>Study the relationships between historical loss, resilience, and age.</td>
</tr>
<tr>
<td>Douglas dissertation</td>
<td>Her study examined the relationships between American Indian young mothers, their experience with parenting, social support, and intimate partner violence.</td>
</tr>
<tr>
<td>Hansen dissertation</td>
<td>The study was an examination of factors that either contributed to or protected against relapse into criminal behavior.</td>
</tr>
</tbody>
</table>
Douglas thesis
Positive life changes, role of grandmother - take on parenting role, recognition of importance education, decrease risky behavior

Belcourt dissertation
Social support, hope, general resilient coping abilities, traditional cultural and spiritual practices, ethnic pride/identification, communal memory. Qualitative research investigating the construct of “Resilience.” Potential treatment implications: spirituality as a suicide prevention. Revalidation of culture, research collaborating with tribes to develop more effective health care systems, cautiously navigating the use of psychology research with AI.

Miller dissertation
Recency/obesity. Experiencing a spiritual moment, recollection of the out of body drinking alcohol, examination of self and others, and reinforcement where shifts in perspectives or behaviors that promoted recovery/obesity.

Belcourt dissertation
Quantitative analysis revealed intervention effect - lower substance use and self-blame. Qualitative analysis revealed benefits from awareness and education. Participants related importance of cultural components. Sharing of grief and trauma experiences, collective healing, expansion of support networks, increased connection to community in development/adjustment of effective coping behaviors.

Hansen thesis
Participation in spiritual practices as a buffer against grief in response unexpected deaths. Investigation into religion or spirituality with grief - consultation with elders. Continued attachment to deceased may provide resilience.

Vale thesis
No correlation with age, aging is not predictive of depression; gender was related to depressive symptoms - being female was associated with higher CES-D scores. Education associated with resilience. Marital/having a partner protective. Few chronic health conditions associated with lower CES-D. Positive evaluations of health status a source of protection, up to a certain point. Social support a protective factor. Personal Mastery protective against depression. Communal mastery negatively associated with CES-D, but not significant in full model. In logistic regression - education status, chronic health conditions, self-reported health status, and personal mastery were most useful predictors.

Croatan thesis
Higher levels of perceived social support, less frequent thoughts of historical loss.

Pierre-Fox thesis
Age and I&I do not effect resilience, culture and “pity” empathy for others as a protective factor.

Douglas dissertation
Attachment to a mother/father and friends but father attachment in particular. Lack of intimate partner violence associated with improved parental satisfaction and efficacy, protection from stigma and increased connection to community in development/adjustment of effective coping behaviors.

Hansen dissertation
Frequent thoughts about historical loss and renewed cultural connection (specifically increased cultural participation) were identified as resilience factors.