DISSERTATION

THE INFLUENCE OF NEGATIVE EDUCATIONAL EXPERIENCES ON HEALTH BEHAVIORS AMONG GENDER NONCONFORMING AMERICAN INDIAN/ALASKA NATIVE PEOPLE

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In partial fulfillment of the requirements
For the Degree of Doctor of Philosophy
Colorado State University
Fort Collins, Colorado
Summer 2013

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ABSTRACT

THE INFLUENCE OF NEGATIVE EDUCATIONAL EXPERIENCES ON HEALTH BEHAVIORS AMONG GENDER NONCONFORMING AMERICAN INDIAN/ALASKA NATIVE PEOPLE

Utilizing data from the National Transgender Discrimination Survey (NTDS) Public Use dataset which reports data collected in the 2009 National Transgender Discrimination Survey (NTDS), completed by The National Center for Transgender Equality and the National Gay and Lesbian Task Force, the purpose of this study is to provide more insight into transgender and gender nonconforming Indigenous people’s experiences in education and the impact on health behaviors.

With 329 responses from those participants identifying as American Indian/Alaska Native, the quantitative analysis methods of bivariate correlations and logistic regression were used to analyze the impact of harassment and policy barriers in higher education settings on substance use and suicidality for gender nonconforming Indigenous people.

Both substance use and suicidality are impacted by the experiences of harassment and barriers in the higher education setting. The impact of these experiences on suicidality is especially concerning, as the rate of over 53% for gender nonconforming Indigenous students is higher than any other group within this sample.

This analysis offers some insight into these experiences of this population and how important interventions in the higher education setting—related to both reducing incidents of harassment and addressing policy and access barriers—may be to the success of gender nonconforming Indigenous students in college.
ACKNOWLEDGEMENTS

As everyone who has ever completed a dissertation knows, this is an academic marathon that you start preparing for way before you ever realize you may attempt a doctoral degree. I would like to acknowledge all those individuals and communities that inspired and encouraged me. From my early mentors Dr. Karen Boyd and Dr. Denise Gardner who to this day still answer my late night calls for advice. Thanks to my Duck colleagues and amazing Dean of Students and CMAE staff at the University of Oregon whose patience and understanding have allowed me to continue my full time work there while completing this degree.

A profound appreciate to my committee for their guidance and expertise and to Dr. Sue Rankin and Allison Subasic without whose support and friendship, I would have quit more times than I could count. To my mini-cohort; Webble, Rindle, and Hema: being able to count on each other, learn from each other, and do this together- I am so fortunate to be a part of that team. To my editor, Mayr Makenna, partner in run Yolanda Valdez Jara, and stats consultant, Jonathan Cook- I would still be staring at data on a screen without you and to the folks whose names I might not have mentioned here- but you let me babble on and on about binary logistic regression and gender this, gender that- you helped me stay committed with your support. To my BFF and dive buddy of 22 years, Donna Yeaw—thanks for listening to all the recounts of data and writing that hardly made any sense but you listened to between each and every dive. To my mom, Claudia Martin and pops- Frank, who I can hear saying even 13 years after he passed away- you can do anything you want to do. Thank you for always being my biggest fans and believing in me. To Eliana and Jose: thank you for being so patient with missed weekends and time spent just reading next to each other on the couch. I am so fortunate to be a family with you. To my partner, editor, laundry fairy and unwavering companion, Alla Blanca- I can’t even imagine what
a mess I would be without you. Thank you for all the hours of QVC watching, weekends of writing on end, and your compassion even when I had little for myself. We are what it should be.
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Chapter 1: Introduction

This chapter introduces the dissertation and provides the purpose, including a brief outline of the needs and gaps in research in this area. It also includes a statement of the research problem, research questions, and a definition of some of the foundational terms. The chapter will conclude with a discussion of the study limitations as well as the researcher’s perspective.

People indigenous to what is now called North America, commonly called Native Americans or American Indians, have a complex history far beyond what is documented in the available literature. The terms Indigenous people, Native Americans and/or American Indians will be used here interchangeably to refer to the category of people present in North America prior to European contact and colonization. While Indigenous people are often combined into one large category, it is important to remember that there are numerous diverse tribes and affiliations with various cultural experiences.

The lives of Indigenous people are often contrasted against Euro-American cultural values and dismissed as unimportant historical narratives because of how divergent the social rules and values were from systems used by the societies that colonized North America. One element of contrast is the cultural expressions of gender and gender identity. This intersection of race/ethnicity and gender identity has little documented literature as it relates to the experiences of contemporary Indigenous people.

The purpose of this study is to provide more insight into gender nonconforming Indigenous people’s experiences in education and the impact on health behaviors. The focus of the primary research partnership was to address the lack of empirical data on anti-transgender discrimination (NGLTF, 2011). This project is a secondary analysis of the National Transgender Discrimination Survey (NTDS) Public Use dataset which reports the data collected in the 2009
National Transgender Discrimination Survey (NTDS), completed by The National Center for Transgender Equality and the National Gay and Lesbian Task Force.

**Prior Research and Need for Study**

Indigenous communities in the United States faced a constant threat to the survival of their culture during over four hundred years of colonialism and the influence of colonialism on their lives and families. Applying social norms based on the values of the non-indigenous community is a way in which colonization can adversely alter the culture of the Indigenous people. A concept of gender exists in most cultures, and when two or more cultures interact, this application of social norms can influence the perspectives of gender that are considered valid and valuable. A question of how current expressions of gender identity, gender role, and gender expression interconnect with the ethnic identity of Indigenous people post colonization is unclear. Are those gender nonconforming and transgender people who identify as American Indian and/or Alaska Native facing similar challenges to those documented in literature about non-Indigenous people? What impact does identity with the transgender or gender nonconforming community have on their experiences in education and with potentially harmful health behaviors?

The literature is somewhat limited regarding the experiences of both American Indian/Alaska Native (AI/AN) and transgender and gender nonconforming people regarding school experiences, suicide, and substance use. Specifically, there is little published intersectional research exploring the experiences of gender nonconforming Indigenous people and school experiences related to these potentially negative health behaviors.
Study Purpose and Significance

The purpose of this study is to provide more insight into transgender and gender queer Indigenous people’s experiences in education and the impact on health behaviors. The focus of the primary research partnership was to address the lack of empirical data on anti-transgender discrimination (NGLTF, 2011). The current project includes a secondary analysis of the NTDS Public Use dataset which reports the data collected in the 2009 National Transgender Discrimination Survey (NTDS), completed by The National Center for Transgender Equality and the National Gay and Lesbian Task Force. The data collected from this survey of transgender people may provide new information on how the American Indian/Alaska Native people who participated have similar or different experiences related to harassment, suicide and substance use. I hope that this research will serve a variety of communities including social justice organizers, social service agencies and educational entities as they partner with Indigenous people to better meet the needs of those communities.

U.S. government and social service agencies like the Bureau of Indian Affairs, Indian Health Services, and the Administration for Native Americans, as part of the Department of Health and Human Services, could use this information to evaluate how culturally competent their services are to those Indigenous people who identify in ways that are gender nonconforming. I believe that this research, if applied, will increase the value of education and services being presented that address homophobia, gender bias, and gender stereotypes. For example, Indigenous people who identify with non-binary gender terms have different experiences with mental health and substance use in some of the programs that are gender specific. These programs may be less effective and problematic for this population.
Educational entities could also find this information helpful as they look to improve the climate of their institutions in regards to Indigenous people. Campus climate data from recent K-12, college, and university materials documenting the discrimination of the LGBT community including those of the Gay, Lesbian and Straight Education Network (GLSEN) 2009 School Climate Survey (GLSEN, 2010); the National Gay and Lesbian Taskforce (NGLTF) 2003 Report on Campus Climate for GLBT people (Rankin, 2003); and Campus Pride’s 2010 State of Higher Education (Campus Pride, 2010) -- show that the experiences of transgender students, faculty and staff are, at minimum, unwelcoming and even reported to be hostile and violent. Institutions from K-12, community college systems, and four-year universities would be well served with data that exposes the different needs of Indigenous community members.

Community organizers at national social justice and advocacy organizations, both those whose mission includes transgender communities, underrepresented ethnic and racial groups, and those committed to access could find this data helpful. The types of outreach methods and communication strategies employed may be changed to better connect with the Indigenous communities they try to serve. Understanding the intersectional nature of ethnic identity and gender identity may help these groups as they address issues of discrimination, healthcare, and other social justice issues.

Research Questions

The first question provides some foundational information for the study about the experiences of Indigenous gender nonconforming people and relates to harassment and discrimination in schools.
1. What is the relationship between identifying as American Indian/Alaska Native within this survey population and the reporting of harassment and discrimination in schools?

Next, two questions were asked to further explore the ways in which school harassment, discrimination and bias impact health behaviors of Indigenous gender nonconforming people.

1. How does experiencing harassment and discrimination in schools impact reported suicide attempts for American Indian/Alaska Native gender nonconforming people?

2. How does experiencing harassment and discrimination in schools impact reported alcohol and drug use for American Indian/Alaska Native gender nonconforming people?

**Definition of Terms**

This study will use definitions for terms from various aspects of the literature. These definitions are presented as a shared language for this study. It is important to acknowledge that some components may vary in different cultural communities and social networks. These terms change over time and cross-culturally. For some of these terms and concepts conflicting definitions exist. The definitions presented are thus not absolute and will be utilized for the purpose of this project. This section includes the definitions that are part of the core analysis of this research. Appendix A includes additional relevant definitions.

In the literature there is some variation in the terms used to identify the ethnic, racial, and nationality of the target population. The original data reported from the National Transgender Discrimination Survey used the term American Indian or Alaska Native. Among other literature in the field you will find the term Native American. In the methodology section and in places
where the information comes from the original survey, I will use the term American Indian/Alaska Native as the survey presented. In this analysis and discussion, I have chosen to use the term Indigenous people in most cases. I chose to use this term as a way of reframing the power of naming in cultural history. As outlined by Yellowbird (1999), there is purposeful need to use First Nations and Indigenous people and avoid using Indian, American Indian, and Native American because they (sic) colonize identities imposed by Europeans and European Americans. Even the term “Indigenous people” is incomplete and discredits the tribal differences that exist among these communities. This name may fall prey to the “under classification” (Yellowbird, 1999) references in discussing the ethnic identity labels of these communities.

One of Yellowbird’s informants (1999) “suggested that these names [Native American and American Indian] are oppressive, counterfeit identities that are misleading, inaccurate, and used to control and subjugate the identities of Indigenous peoples and undermine their right to use tribal affiliation as a preeminent national identity” (p.6). In the recent works of Driskill, Finely, Gilley, & Morgensen in *Queer Indigenous studies: Critical interventions in theory, politics, and literature*, many of the authors use the term GLBTQ2 to refer to Indigenous gay, lesbian, bisexual, transgender, queer and Two-Spirit lives and communities. In the hopes of finding some culturally relevant common language, at least among social science researchers, and to pool the collective literature on pre-colonization populations, the term Indigenous people/person will be used here. When specific tribal affiliations are referenced and specific tribal language is available, the term of the person and culture it refers to will be used.

**Indigenous people:**

Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future
generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system (United Nations, 2011).

Native American:
American Indian and Alaska Native persons having origins in any of the original peoples of North and South America (including Central America) and who maintain tribal affiliation or community attachment (United States Census Bureau, 2001).

American Indian:
“As a general rule, an American Indian or Alaska Native person is someone who has blood degree from and is recognized as such by a federally recognized tribe or village (as an enrolled tribal member) and/or the United States. Of course, blood quantum (the degree of American Indian or Alaska Native blood from a federally recognized tribe or village that a person possesses) is not the only means by which a person is considered to be an American Indian or Alaska Native. Other factors, such as a person’s knowledge of his or her tribe’s culture, history, language, religion, familial kinships, and how strongly a person identifies himself or herself as American Indian or Alaska Native, are also important. In fact, there is no single federal or tribal criterion or standard that establishes a person's identity as American Indian or Alaska Native. There are major differences, however, when the term “American Indian” is used in an ethnological sense versus its use in a political/legal sense. The rights, protections, and services provided by the United States to individual American Indians and Alaska Natives flow not from a person's identity as such in an ethnological sense, but because he or she is a member of a federally recognized tribe. That is, a tribe that has a government-to-government relationship and a special trust relationship with the United States” (Bureau of Indian Affairs, 2012).

Gender:
Primarily a system of symbols and meanings—and the rules, privileges, and punishments pertaining to their use—for power and sexuality: masculinity and femininity, strength and vulnerability, action and passivity, dominance and weakness (Nestle, Howell, & Wilchins (Ed.), 2002).

Gender Expression:
Refers to how one chooses to indicate one’s gender identity to others through behavior and appearance, which includes clothing, hairstyle, makeup, voice, and body characteristics. Gender expression can vary over time and in different contexts, as demonstrated by individuals who cross-dress on a limited basis or who do so only when the circumstances permit (Beemyn & Rankin, 2011).

Gender Identity:
Refers to an individual’s sense of his or her own gender, which may be different from one’s birth gender or how others perceive one’s gender. The centering of gender on an individual’s self-concept, instead of on the person’s biological sex, creates a
discursive space that allows for a more nuanced understanding of gender. (Beemyn & Rankin, 2011).
In essence gender identity is self-attribution of gender. There is often difficulty of trying to maintain a self-image without a clear gender identity, but it also shows how one's gender identity can be relatively independent of the gender attributions made by others (Kessler & McKenna, 1978).

**Gender Queer/Genderqueer:**
A term which is used by some people who may or may not fit on the spectrum of trans or be labeled as trans but who identify their gender and sexual orientation to be outside of the binary gender system, or culturally proscribed gender roles. As with any other groups that may be aligned with transgender identities, the reasons for identifying as genderqueer vary. Gender queer people could also be people who identify as both transgender and queer, individuals who challenge both gender and sexuality regimes and see gender identity and sexual orientation as overlapping and interconnected (Midwest Trans & Queer Wellness Initiative, 2012).

**Transgender:**
A general term for all individuals whose gender histories cannot be described as simply female or male, even if they now identify and express themselves as strictly female or male. (Beemyn & Rankin, 2011).

Although there is not universal agreement on the term transgender, there is an emerging semanticity that is inclusive of all people who cross-dress. It incorporates those who self-identify as male-to-female transsexuals, female-to-males, male transvestites, cross-dressers, and those who lie between the traditional identity of transsexual and male transvestite, as well as those persons "...who steer a middle course, living with the physical traits of both genders. Transgenderists may alter their anatomy with hormones or surgery, but they may purposefully retain many of the characteristics of the gender to which they were originally assigned. Many lead part-time lives in both genders, most cultivate an androgynous appearance" (Bolin, 1997).

Now commonly used in two ways: as both an identity and a descriptive adjective. (Wilchins, 2002).

**Two-Spirit:**
Indigenous GLBTQ people at the Third International Gathering of American Indian and First Nations Gay and Lesbians in Winnipeg discussed their desire for a term that could displace “berdache” while naming, at once, their diverse lives and their sense of relationship to Indigenous traditions of gender/sexual diversity and spirituality. Two-Spirit emerged from these conversations. Well before it gained traction in academic writing, Two-Spirit already circulated widely among GLBTQ Indigenous people on reservations/reserves and in urban areas, and many community organizations incorporated the term into their titles (Driskill, Finely, Gilley, & Morgensen, 2011).
Researcher’s Perspective

My own experiences working with lesbian, gay, bisexual, and transgender people in student affairs over the past fifteen years have certainly continued to broaden my awareness of how limiting labels and stereotypes are on individuals. I have seen the impact a binary system can have on people -- be it white and non-white; heterosexual and non-heterosexual; or gender conforming and gender nonconforming. I believe that these binary systems negatively impact those who do not fit into the dominant paradigm. I have personal experiences with discrimination and limited access due my gender expression being outside this dominant paradigm.

My work and personal experiences have also exposed me to covert and overt discrimination on issues of sexual orientation, gender expression and identity, and ethnic identification. Microaggressions (Sue et. al, 2007) are part of my consciousness in relation to their impact on me and the impact on others. I have felt the limitations of having no correct choice on forms, the uncomfortable nature of gendered restrooms, and language that does not provide for many options for those of us who do not fit in one box or the other.

My perspective also includes a strong personal sense of an Indigenous identity that feels blurry about the sense of maleness or femaleness, of masculinity and femininity. I can relate to a sense of self that has existed before I ever had words for the experience that put me not somewhere between male or female but as part of a spectrum that does not have those as polar opposites. Overall, this is the complex and personal lens through which I explored my research questions.

I will be clear that my experiences do not include being raised among other Indigenous people. My experiences as a child and young adult included only fragmented pieces of
Indigenous culture and community. Most of those were disfigured by racism and cultural shame. As much as I hope this research is helpful for the educational and service communities, I also hope it acknowledges a piece of what we all carry inside of us, a desire to be authentic in our own lives.
Chapter 2: Literature Review

The content for this section is in three subsections. The first is a discussion of the theoretical framework components based in social constructions of gender and race, with a focus on gender through a non-binary lens and race and ethnicity specific to Indigenous people. The second section presents the literature regarding negative educational experiences as it relates to gender nonconforming and Indigenous people. The final section includes literature on substance use and suicidality within specific populations of gender nonconforming people and Indigenous people.

Part One: Social Constructs of Gender and Race

Social constructionism. Social constructionist theory is built upon the major contributions of Berger and Luckmann’s (1966) text The Social Constructions of Reality. The authors contended that the “sociology of knowledge must concern itself with whatever passes for ‘knowledge’ in a society, regardless of the ultimate validity or invalidity (by whatever criteria) of such ‘knowledge’… that the sociology of knowledge is concerned with the analysis of the social constructions of reality” (Berger & Luckmann, 1966, p3).

Vivian Burr sets forth a description of social constructionism as loosely grouped approaches that had one or more of the following assumptions: a critical stance towards taken-for-granted knowledge, historical and cultural specificity, knowledge that is sustained by social processes, and knowledge and action that are partnered (Burr, 1995). These qualities of social constructionism, part of the postmodern dialogue, look to the individual or collective of individuals for the creation of knowledge and reality. A socially constructed paradigm looks beyond narrative theories, theological underpinnings and isolated scientific premise. Burr
examines the role of language, discourse, and the power relations in the application of social construction theory as social constructionists focus on language as the transportation for theory and the creation of reality (Burr, 1995).

Social constructionism is an appropriate theoretical framework for the analysis of human experiences and socially regulated paradigms. Knowledge that is created and sustained by social interaction frames cultural experiences and their role in the creation of knowledge.

The formation of the self, then, must also be understood in relation to both the ongoing organismic development and the social process in which the natural and the human environment are mediated through the significant others. The genetic presuppositions for the self are, of course, given at birth. But the self, as it is experienced later as a subjectively and objectively recognized identity, is not (Berger & Luckmann, 1966, p.48).

As discussed in the following sections, where a biological premise is firmly rooted, there is little room for discourse and an easy assumption of morality on the basis of the “natural ways” things should exist in a society. However, once a biological premise is uprooted there is room for another discussion regarding how our social interactions and ways of making sense of our world create a system of stratification. Whenever there is the construction of something, there is the possibility of deconstruction.

Race as a social construct. Race gradually emerged as a term referring to those populations then interacting in North America--Europeans, Africans, and American Indians. The first references to race as a biological construct arose in the mid-20th century. Race differs from ethnicity, as ethnicity “refers to a cluster of people who have common culture traits that they distinguish from those of other people” (Smedley & Smedley, 2005, p19). In scholar Anibal Quijano’s discussion of power and colonialism in Central America, “race emerges early in the sixteenth century, alongside complex and global (re)organization of power around three interrelated and inseparable factors: ‘coloniality,’ capitalism, and Eurocentrism. The
development of the concept of race occupied a central role in the shaping of the world system” (Hames-Garcia, 2011, p.51). Original discussions of the origins of race situated race in biology, genetics, and physical characteristics. There are research studies on the genetic and physical differences in racial groups that cover bodies, intellect, and abilities. Biologists acknowledge we cannot ignore the differences in people generally used to assign race: skin color, physical appearance, and language. Scholar Walter Benn Michaels suggests that if a racial identity, such as skin color and physical characteristics, is not reducible to action it cannot be a social construction. “Identity that is identical to action is not really an identity- it’s just the name of an action” (Hames-Garcia, 2011, p.46).

However, these differences may be scientifically insignificant outside of a social framework. “Racial groups” lack genetic variation between different “races” for scientists to be able to classify humans in subspecies.

Theorists claim that even if non-human subspecies exist, there are no human ones; hence no races. Support for this argument comes from the detailed work in human genetics which reveals that there is almost as much genetic variation within racial groups (African, Asians, Caucasians) as there is between them. Humans are supposedly too genetically similar to each other to justify dividing them into races (Andreason, 2012, p.S654).

This is echoed in the work of evolutionary biologist Joseph Graves, Jr. as he challenges the genetic explanations for social differences. "The genetic distances in humans are statistically about ten times lower (2 percent) than the 20 percent average in other organisms, even when comparing the most geographically separated populations within modern humans. There is greater genetic variability found within one tribe of western African chimpanzees than exists in the entire human species” (Hames-Garcia, 2011, p.57).

Additionally, some scholars suggest that these perceived differences are not reliably measured, nor are they scientifically meaningful (Smedley & Smedley, 2005).
“One cannot reduce race to behavior, genes, or physiognomy alone. Race is not the same thing, furthermore, as class, color, culture, ethnicity, or nationality. This need not mean, however, that race has no relation to these things” (Hames-Garcia, 2011, p.47).

So if race in and of itself does not get support as a biological concept with enough variably to warrant stratification into racial identities, then what might explain these separations? According to Quijano, race has two crucial characteristics. “First, its origin presupposed the existence of biological differences from which followed a natural hierarchy among superior and inferior groups. Second, race enables (and was enabled by) new social and economic relations; racial identities thus became constitutive of unequal roles, locations, beliefs, and practices” (Hames-Garcia, 2011, p.52).

This second component, race and its relationship to social and economic relations and the experiences of racial identity, may be more about the idea of race versus the biology of physical difference. Smedley and Smedley (2004) suggest that all of these arguments about the origin and history of race rarely take into account “the idea of race.” They encourage analysis of this recent historical construct that was created after different population groups had contact with each other.

Analysis of the social stratification of race can be especially salient in discussing the racial discourse of the late 17th century with slavery and westward movement of Euro-Americans. The slavery of Africans and other non-white people and the dehumanization of Indigenous people as settlers moved into North American lands were increasingly in the political dialogue. Enforcing the biological imperative of white supremacy was a socially acceptable rationale for the treatment of non-white people. It helped to ground differences in biology to rationalize the dehumanization as a tool for the subjugation of one people over another. These
binary systems and dichotomies of power have continued well beyond that era. “The well-discussed dichotomies of modern Western thought make up but one enduring legacy of the colonially of power: civilized-primitive, culture-nature, male-female, mind-body, normal-abnormal, north-south, reason-passion, superior-inferior, white-black” (Hames-Garcia, 2011, p.54).

So if racial difference determined by biology is not scientifically defensible and yet the perceived differences are used as weapons of oppression, where did this “idea of race” that Smedley and Smedley refer to develop? Some constructivists argue that "race" is a social fiction; it is entirely a product of the ways that people think about human differences. Others argue that race plays a prominent role in human social practices; hence the social reality of race cannot be denied (Andreason, 2012). Rockquemore and Brunsman (2002) write "racial identity is malleable, rooted in both macro and micro social processes, and that is has structurally and culturally defined parameters” (p.115).

Several researchers suggest that while “race has a powerful role in defining the experiences of individuals and the opportunities available, racial categories have no biological basis” (Bonam, Peck, Sanchez, & Shih, 2007; Goodman, 2000; Zack, 1995). The reporting of multiracial individuals who reject biologically based social stereotyping may provide empirical support for social construction and the impact discourse has on the valuing of racial categories. In the work of Bonam, Peck, Sanchez, & Shih (2007) on multiracial individuals, when “multiracial participants subscribed less to the notion that racial differences were biologically based, they were more likely to inhibit stereotypes in response to race salience, and were less affected by race-based stereotypes than were monoracial participants” (p.131). They also began testing another hypothesis promoted by the research of Steele & Aronson
regarding stereotype threat. They found direct evidence that emphasizing race as a social construction buffers individuals from stereotype threat effects. “In short, emphasizing the social construction of race may lead multiracial individuals to buy into racial stereotypes less” (p.131).

A compelling argument can be made for an interaction of racial differences defined by biological characteristics, but there must be some construction by society as to the stratification rules, how and who make these determinations and the power to enforce those decisions. What is clearer is that race, racial identity, and racial stratification are complex, interwoven aspects of modern society. Scholar Manuel Castells attempts to distinguish race, “understood as the source of oppression and discrimination and as an externally imposed biological categorization, from ethnicity understood as a source of meaning and identity that comes closer to nationality, although without the key features of language and territory” (Hames-Garcia, 2011, p.54).

These more integrated analyses try to find the balance between the very challenging definition and context. The why of race is inextricably linked to the how of race.

Michael Hames-Garcia, who writes about the interconnections of multiple social identities, suggests that race might not be held to only one claim of origin.

That the claim race is real could mean at least three different things: (1) race has a material-economic reality in the immediate effects and legacies of racism; (2) race has a social and psychological reality as an existing system of beliefs and attitudes with material effects (this would include certain effects on the production and acquisition of knowledge); or (3) race exists in a physical or biological form, as bodily matter (Hames-Garcia, 2011, p.55).

Indeed race might be dependent on all three realities to exist in the forms in which race exists in societies, specifically in Euro-American culture. In this construction of race, as Hames-Garcia suggests, “one can easily argue for the reality of race as a social location that one finds oneself placed in by racial classification given the substantial empirical data on the effects of social ideas of race” (p.62). Locating oneself in race and a racial identity acknowledges the
physical or biological form but also weighs heavily in favor of the construction of race and racial classification as core to the contemporary experience of racially marginalized people.

**Gender as a social construct.** Burr specifically uses gender as an example in her text, *An Introduction to Social Constructionism*, as a “more radical example” of the critique of taken-for-granted knowledge.

Our observations of the world suggest to us that there are two categories of human being- men and women. Social constructionism would bid us to question seriously whether even this category is simply a reflection of naturally occurring distinct types of human being...but we should ask why this distinction has been given so much importance by human beings that whole categories of personhood (i.e. man/woman) have been built upon it (Burr, 1995, p3).

While the body of literature on the development of gender is broad and comes from various fields including biology, psychology, sociology, and anthropology, there are three difficult challenges when discussing gender construction. Those challenges are (a) placing gender in culturally relevant and concise terms, (b) understanding that gender is not just a correlation to biological sex, and (c) recognizing that it involves the presentation of power. Bornstein offers a fairly efficient attempt at defining gender; “gender involves not only gender assignment--the gender label given to someone at birth based on their perceived sex--but also gender attribution, gender roles, gender identity, and gender expression” (Bornstein 1994). However, gender is more than just a collective of these other elements of gender.

Gender is a system of meanings and symbols--and the rules, privileges, and punishments pertaining to their use--for power and sexuality: masculinity and femininity, strength and vulnerability, action, and passivity, dominance and weakness. But like any language, gender's primary effect is not repressive but productive: it produces meanings. They are created through a vast and visible top-down structure: binary birth certificates, restrooms, adoption policies, immigration laws, passports, and marriage laws. But they are also produced and maintained from the bottom up, through thousands of small, everyday acts--interactions that create and destroy gendered meanings in every moment (Wilchins, 2002, pp. 25-26).
Many cultures perceive biological sex in a binary framework and apply socially constructed notions of gender to those sex categories. These often become the pervasive and systemic cultural norms that govern gender expression and roles. Where there are male and female categories there are often “men” and “women.” The application of gender on sex-based characteristics creates and reinforces a dualistic option for one’s gender identity.

Cultural constructions of gender, … simply the ideas that give social meaning to physical differences between the sexes, rendering two biological classes, male and female, into two social classes, men and women, and making the social relationships in which men and women stand toward each other appear reasonable and appropriate (Ortner & Whitehead, 1981 p.83).

Research that compares the experiences of men and women, the characteristics of masculinity and femininity, or the differentials of power with a binary sex/gender system are presented and debated often. While these are worthy of further analysis for the purpose of this research, I am going to focus on the discussion of gender as a socially constructed non-binary paradigm. Some of the foundational works discussing gender from a non-binary framework include Kessler and McKenna’s 1978 book, *Gender: An Ethnomethodological Approach*; the collective works of Judith Butler, but most notably *Gender Trouble: Feminism and the Subversion of Identity* (1990), *Bodies That Matter: On the Discursive Limits of "Sex"* (1993), and *Undoing Gender* (2004); and the contributions of Anne Fausto-Sterling, *The Five Sexes: Why Male and Female are not Enough* (1993) and *Five Sexes Revisited* (2000).

The creation of gender is more mutable when individually perceived. A key critical limitation is the inability of people to see beyond their own cultural lens. Butler (2004) argues that gender is a performance rather than an immutable quality;

If gender is a kind of doing, an incessant activity performed, in part, without one's knowing and without one's willing, it is not for that reason automatic or mechanical... One does not "do" one's gender alone. One is always "doing" with or for another, even if the other is only imaginary. (Butler, 2004, p.1).
Not only does Butler propose that gender is a “performance” but that it is fluid and has cultural meanings within that performance. “Terms such as ‘masculine’ and ‘feminine’ are notoriously changeable; there are social histories for each term; their cultural meanings change radically depending upon geopolitical boundaries and cultural constraints on who is imagining whom, and for what purpose (Butler, 2004, p3).

The work of Kessler & McKenna, who transformed critical thinking on binary gender constructions as early as the 1970s, stated, "Our theoretical position is that gender is a social construction, that a world of two ‘sexes’ is a result of the socially shared, taken-for-granted methods which members use to construct reality" (Kessler & McKenna, 1978, p.2). Even more influential is the notion that the construction of gender is culturally bound. They wrote by “viewing gender as a social construction, it is possible to see descriptions of other cultures as evidence for alternative but equally real conceptions of what it means to be a woman or a man” (Kessler & McKenna, 1978, p.22).

However, until an individual comprehends the process of accepting and engaging in these roles and identities, their reality will be based on the binary assumption that sex equals gender. “Assumption: It is a fact that there are two genders; each person is a mere example of one of them; and the task of the scientist is to describe, as accurately as possible, the constant characteristics that define male and female for all people and for all time. This is the reality in the Western world” (Kessler & McKenna, 1978, p.4).

A method for raising awareness of the social construction of the binary system may be the examination of the performance aspects of identity Judith Butler offers. Understanding gender expression and identity in these terms, there are possibilities to veer from a more normative gender path.
Gender is not exactly what one ‘is’ nor is it precisely what one ‘has.’ Gender is the apparatus by which the production and normalization of masculine and feminine take place along with the interstitial forms of hormonal, chromosomal, psychic, and performative that gender assumes. To assume that gender always and exclusively means the matrix of the "masculine" and "feminine" is precisely to miss the critical point that the production of that coherent binary is contingent, that it comes at a cost, and that those permutations of gender which do not fit the binary are as much a part of gender as its more normative instance” (Butler, 2004, pp.42).

There are people and societies who question the cultural assumption that gender is absolute both in the correlation to biological sex and that there are only two possible options for the human experience. Whether identifying with the terms transgender, transsexual, gender queer, or gender nonconforming, there are people who transgress the “biological sex equals gender” formula. In this process there is room for the personal exploration of gender but also opportunities to analyze how deconstructing this formula might challenge the binary overall. In some cases “transgender” may mean another form of gender identity defined or limited by qualities of a physical nature or status.

Transgender is an intermediate gender category by virtue of morphology coupled with gender presentation (which is usually in opposition to their biology). All three categories are distinct from both women and men. That is, they are marked as other. Western ideology insists that sex and gender correspond such that bodies are considered part of gender. Therefore, transpeople, because they mix bodies and genders, have intermediate genders and obfuscate the Western view of two and only two genders (Cromwell, 1999, p.99).

Non-binary gender identities are not just about the acknowledgement that sex and gender are not intrinsically linked. It is the process of challenging this limitation of the physical and framing the expression of gender as a fluid and solely contextual element that feels the most “non-binary” or transgressive.

So the word ‘transgender’ describes much more than crossing between the poles of masculinity and femininity. It more aptly refers to the transgressing of gender norms, or being freely gendered, or transcending gender altogether in order to become more fully human. Transgender has to do with reinventing and realizing
oneself more fully outside of the current systems of gender. There are probably as many genders as there are people (Bolin, 1997, p54).

It is important to remember that this process of transgressing these normative values is not without risk. “Binaries are about power, a form of doing politics through language. Binaries create the smallest possible hierarchy of one thing over another. They are not really about two things, but only one” (Wilchins, 2002). Whenever these hierarchies are threatened, individuals and society as a whole can respond even in violent ways to ensure that the system is not upset.

This violence emerges from a profound desire to keep the order of binary gender natural or necessary, to make of it a structure, either natural or cultural, or both, that no human can oppose, and still remain human. If a person opposes norms of binary gender not just by having a critical point of view about them, but by incorporating norms critically, and that stylized opposition is legible, then it seems that violence emerges precisely as the demand to undo the legibility, to question its possibility, to render it unreal and impossible in the face of its appearance to the contrary (Butler, 2004, p.35).

By devaluing those who express gender identities that, even without knowledge of the participant, actively challenge gender boundaries the power system remains in favor of those perceived to be “normal.”

On the one hand, when portrayed as strange and deviant, different systems of sex and gender relations can be used to reaffirm the belief that the West's culturally dominant understanding of sex and gender identity is natural and superior. On the other hand, placed in a broader cultural and historical context, the depiction of a different sex and gender system can also be used to demonstrate that the binary and heterocentric understanding of “normal” sex and gender identity in the United States is not a fact of nature but the product of a specific historical legacy, one reinforced not by the force of nature but by relations of privilege and exclusion” (Currah, 2006, p.258).

In offering a critique of the gender binary system, a question emerges; what is there beyond the binary? Are there different ways to view the human experience and expressions of gender?

Diverse manifestations of transgender, however, are certainly not new. We have existed throughout history all over the planet. We are normal, recurring
expressions of human nature. Various cultures in the past have honored our unique ability to make special contributions to society as shamans, spiritual leaders, visionaries, healers, mediators, counselors, teachers, and in other specific ways. Within these value systems, weeds don't exist (Bolin, 1997, p.56).

**Intersectionality: race and gender.** There is something to be learned from our cultural history and the lives and experiences of others.

Cultural variations in "gender systems" may then appear both in regard to the content of clusters and in regard to their core features. In addition, as long as gender is not fully defined by any one feature alone, there is always the possibility that for various reasons--and the reasons will vary depending on the gender system--a mixed gender or deficient gender status may arise for certain persons or categories of persons (Ortner & Whitehead, 1981, p.83).

We need not create a new paradigm to reframe gender. Those individuals who are living outside of the binary can attest to the existence of this experience. Are there other options, and what does this mean for how we define ourselves and our communities? Butler posed some key questions in this discussion.

What new forms of gender are possible? How does this affect the ways in which we live and concrete needs of the human community? And how are we to distinguish between forms of gender possibility that are valuable and those that are not? I would say that it is not a question merely of producing a new future gender that does not yet exist. The genders I have in mind have been in existence for a long time, but they have not been admitted into the terms that govern reality. So it is a question of developing within law, psychiatry, social, and literary theory a new legitimating lexicon for the gender complexity that we have not been living for a long time. Because the norms governing reality have not admitted these forms to be real, we will, of necessity, call them "new" (Butler, 2004, p.31).

The common thread may be the artificial connection race and gender has to biology and determination. Much like gender is artificially attached to biological sex, race is attached to physical characteristics and common ancestry. “… racial categories are arbitrary, subjective, and ultimately meaningless in any biological sense... Race does not exist outside of our social world” (Bonam, Peck, Sanchez, & Shih, 2007, p. 125). Much like with gender nonconforming
people there is little flexibility for an existence between racial spaces in a system that was created historical binaries of black and white.

**Intersectionality: gender identity in North American Indigenous culture.** It is the specific intersection of race/ethnicity and gender identity that is most relevant for this analysis. The focus on the cultural aspects of binary deconstruction is demonstrated in some of the gender identity constructs in Indigenous cultures. This cultural construction is detailed in the following historical outline to provide an integral foundation and also to demonstrate the impact of Euro-American colonial influences.

In Euro-American history, the terms applied to Indigenous people who seemed gender nonconforming were numerous. These terms include “in Spanish, sométicos (sodomites), amarionadas (from Mary, meaning ‘effeminate’), mujerados (literally ‘made woman’), putos (male prostitutes), and bardajes (from bardaj, Persian and Arabic for ‘slave’ or ‘kept boy’) and in English, ‘hermaphrodites,’ ‘sodomites,’ ‘men-women,’ ‘inverts,’ ‘homosexuals,’ ‘transvestites,’ and ‘transsexuals’ (Roscoe, 1992, p.5). In most of the literature from non-Indigenous anthropologists, the term “berdache” is found across decades of documentation (Lang,1998). In the last three decades the term Two Spirit (also written as Two-Spirit) was added to the list of terms that in part refer to Indigenous people whose gender role and/or identity is different from normalized Euro-American constructs.

While the term “berdache” is very controversial, it is included here as part of the historical literature review. The term “berdache” and its variations are documented in Indigenous literature as inaccurate and not part of the native languages of the people it is used to describe. Therefore, throughout this text I have chosen to put the term in quotes to acknowledge these limitations and to honor the voices of Indigenous people.
There is some shared belief that the word “berdache” might have originated from the Persian bardaj, possibly spread via the Arabs and then to the Italian language as bardasso and to Spanish as bardaxa or bardaje by the beginning of the 16th century. This is about the same time the word appeared in French as bardache. The term in many of those languages meant “kept boy,” “male slave,” and “male prostitute” (Jacobs, Thomas, & Lang, 1997; Roscoe, 1988, 1998; Williams, 1992).

While there has been great variance in what terms are used to describe this experience in much of the academic literature, there is no support that these terms reflect the ways Indigenous people identified using their tribal languages. More contemporary speakers both Native and non-Native struggle with this naming. In the 2011 text, *Queer Indigenous studies: Critical interventions in theory, politics, and literature*, the editors write

> Throughout our introduction, "Indigenous GLBTQ2" will be used to include Indigenous people who mark their genders and/or sexualities as outside of dominant heteropatriarchal Eurocentric constructions. This will include those who might disidentify with all of these terms, instead using terms from Indigenous languages to talk about their identities (Driskill, Finely, Gilley, & Morgensen, 2011, p.24).

The complexity of naming notwithstanding, there is historical literature by non-Native people that Indigenous communities in North America may have expressed cultural norms that “publicly recognized, institutionalized change in role and status as it related to sex and gender identity, roles, and expression” (Forgey, 1975, p.2).

Early descriptions of “berdache” painted a pathological or abnormal presentation of identity as in Hill (1935), “Unlike our own society, many primitive societies recognize in a social sense, and include in their culture pattern, a place for those individuals whose psychic or physiological peculiarities set them apart from the normal” (p.273). Hill was referring to his experiences living among the Navaho in the early part of the 20th century to study
“hermaphrodites and transvestites” in that culture. George Devereux, an anthropologist, reports his interpretations of the Mohave people. “Mohave recognize two definite types of homosexuals. Male transvestites, taking the role of the woman in sexual intercourse, are known as alyha. Female homosexuals, assuming the role of the male, are known as hwame” (Devereux, 1937, p.500). This interlacing of differing gender expression and same-sex/gender sexual behavior was common among these historical accounts.

Later in the century, researchers offered a slightly more contextual evaluation of gender expression, identity, performance, and the impact colonialism had on cultural aspects of Indigenous people. "Most informants felt that the berdache was at one time a highly honored and respected person, but that the Winnebago had become ashamed of the custom because the white people thought it was amusing or evil" (Lurie, 1953). Anthropologists during this time reported the perceived disappearance of the “berdache” among Indigenous people. “Since Laspeke, no boy in the last twenty years has shown any promise of transvestism. Kasinelu, the clever potter and plasterer, is therefore the only surviving transvestite in Zuni, and almost certainly will be the last one” (Parsons, 1939, p. 339).

During the 1960s and 70s, a body of literature emerged that discussed early encounters with Indigenous people who expressed gender in ways not always congruent with their perceived sex. It is important to note that during this time period, there is the start of a paradigm shift in the United States where homosexuality, and in a small part gender identity and expression, are debated as not mental health issues but as an aspect of civil rights.

Researchers, anthropologists, and social scientists began to evaluate the impact the white dominant discourse had on historical interpretation of gender variant Indigenous people.
Definitions of the “berdache” are presented that attempt to challenge the bias and stigma of previous cultural interpretations.

The "berdache" is characterized as "an individual of a definite biological sex (male or female) who assumes the role and status of the opposite sex, and who is viewed by the community as being of one sex physiologically but having assumed the role and status of the opposite sex" (Forgey, 1975, p.3).

An element that is reinforced during this time is the binary nature of the “berdache” experience as presented in Forgey and in the following quote. “One clear fact is that the berdache was a figure who straddled two worlds--the world of men and the world of women” (Thayer, 1980, p.291).

Whether these researchers refer to a “berdache” as moving from one sex to another, to the opposite sex, or presenting as an intermediate between male and female or combining genders, there is a theme of the binary present during this period. Lang defined "berdache" as "a person with a physically unambiguous sex who voluntarily and permanently takes on the culturally defined activities and occupations of the opposite sex, and who has a special (ambivalent) gender status assigned to his/her culture" (Lang, 1998).

“Berdache” among North American Indians may be roughly defined as a person, usually male, who was anatomically normal but assumed the dress, occupations, and behavior of the other sex to effect a change in gender status. This shift was not complete; rather, it was a movement toward a somewhat intermediate status that combined social attributes of males and females. In this work the authors state also that “although ‘berdache’ originally designated a male, its etymology became irrelevant long ago, and it is used here for both sexes” (Callendar et al., 1983, p443).

In many of these articles and books there emerges a theme and tension. A position is set forth that, at least in some tribes, the “berdache” status may have been that of a third or intermediate gender, somewhere between male and female, and embodying some aspects and privileges of each (Callender & Kochem, 1983; Greenberg, 1985; Jacobs, 1983; Mandelbaum,
1940; Martin & Voorhies, 1975; Miller, 1982; Whitehead, 1981). Walter Williams, in the 1992
text *The Spirit and the Flesh*, presents several problematic reasons why the term “berdache” and
other terms used to define gender that is expressed outside of the culturally defined binary of
men and women, male and female, are inaccurately used to describe the Indigenous experience.
He argues that there is significant evidence to dismiss the previously made connections between
“berdache” and “transvestism,” “hermaprodism,” and “transexualism” (Williams, 1992).

There is an important critique for this renewed interest in Indigenous gender diversity and
methods of contact and construction. Indigenous sexual and gender diversity was popularized in
the late 20th century by an array of writing from non-Indigenous GLBTQ writers, which
included topics such as the anthropology of “berdache” to sexual minority cultural and activist
literatures. A motivation for sharing these texts more broadly during this time period may be
connected to the desire for LGBT activist to normalize these experiences in other cultures.

A key theme addressed non-Natives in a normatively white register, saying that
Two-Spirit histories grant non-Natives self-acceptance in their own bodies,
identities, and social lives. This story recognizes that colonialism occurred and
even suggests its critique, but it functions to appropriate Native history so non-
Natives--here, white people--will feel more at home as settlers on Native land
(Morgensen, 2011, p. 13).

This critique is an effort to reconnect the documentation and interpretation of the
experiences of Indigenous people to the voices that experience them versus using Indigenous
experience to serve a mostly white LGBTQ community.

During the late 1990s and in more current literature, there is the introduction of the term
Two Spirit. The Two Spirit movement in the United States grew out of the Native American gay
and lesbian movement, which held its first international gathering in Minneapolis in 1988. In
Winnipeg, Manitoba, in the summer of 1990, those who attended the third annual gathering
focused on finding a new term for Native sexualities and gender diversity (Thomas & Jacobs, 1999).

In a traditional Native worldview, men typically see the world from a male perspective, whereas women typically see the world from a female perspective, each perspective respectively defined by the social context of the tribe at any given point in time. On the other hand, Two Spirit people, believed to possess both male and female spirit, were looked on as having unique abilities to view both male and female boundaries of limited human existence (Garrett & Barret, 2003, p.134).

This is also accomplished by recognizing that the term Two Spirit is not intended to mark a new category of gender.

Instead Two-Spirit is an indigenously defined pan-Native North American term that bridges Native concepts of gender diversity and sexualities with those of Western cultures. Two-spirit roles and identities are also referred to as gay, lesbian, transvestites, transsexual, transgender, drag queens, and butches, as well as winkte, nádleeh and other appropriate tribal terms (Thomas & Jacobs, 1999, p. 92).

While not all Indigenous people feel the term Two-Spirit represents them or their experience, there is hope that this dialogue will emphasize the importance of Indigenous voices being heard directly from the people. Indigenous scholars acknowledge that there are challenges to historical and contemporary labels.

Two-Spirit was proposed in Indigenous organizing and the United States to be inclusive of Indigenous people who identify as GLBTQ or through nationally specific terms from Indigenous languages. Our purpose here is not to assert an umbrella term for the countless identities that fall under categories such as queer, Two-Spirit, transgender, gay, bisexual, or lesbian. Each of these terms inevitably fails to reflect the complexities of Indigenous constructions of gender and sexual diversity, both historical and as they are used in the present (Driskill, Finely, Gilley, & Morgensen, 2011, p. 3).

In speaking with Indigenous people regarding the use of the label Two-Spirit, some of the realities of labels are better expressed by exploring the everyday experiences. Indigenous
scholar Qwo-Li Driskill shares the voices of Indigenous people and their experiences with Two-Spirit terminology.

Daniel wasn’t comfortable using the term Two-Spirit for himself, because he felt the term was unnecessarily normalizing. “I actually don't use Two-Spirit very often. Queer works really well for me. I like its ambiguity, and I like that it kind of shakes things up a bit. For myself, I think Two-Spirit is a bit...I understand the reasons for connecting it to a spiritual tradition, and I think that's important, but I think is some ways it normalizes in ways that I don't know if necessarily we need to be normalized” (Driskill, 2011, p.99).

This idea of normalization is also one that resonates with queer identity and the need to fit into a heteronormative culture. Some of the critics from within the LGBTQ movement struggle with the focus of some LGBTQ organizations on same-sex marriage as an example of an attempt to normalize queer relationships.

Two-Spirit depends on where I'm at 'cause so many people don't know what that is...Obviously if I'm with Natives I would [use the term], if I thought they'd understand it... I like what they said today, about the fact that Two-Spirit embraces more than just sexuality, that it embraces the whole spirit part of who we are as a person, honoring and being genuine to who we're born as (Driskill, 2011, p.100).

The principle that some identities are contextual and used only within social and/or cultural identity groups is a narrative shared in other communities. The challenge is not only acceptance of those labels but how the label will be defined by the knowledge or experiential base of the listener.

Within in the same edited works and even from the writings and research of the same individual, it is unclear if the experience of gender identity and sexual orientation can or should be separated in Two Spirit definitions and descriptions.

Gilley suggests that “strategically turning attention away from the sexual orientation aspect of historic gender norms, so as not to associate themselves with popular gay culture, and towards cultural practices, generated an entire genre of writing and analysis wherein same-sex desire was merely a footnote. This approach no doubt generated a more accurate portrait of gender construction in
prehistoric and historic Native America but, as I argue muddied our understanding of the experiences of contemporary gay Native peoples” (Gilley, 2011, p. 238).

This perspective makes grounding current explorations of gender identity from a historical context within Indigenous communities challenging in the least. It would seem that two perspectives are at odds; the request that gender identity is given its own platform, separate from sexual orientation, in queer analysis and the idea that in Indigenous communities it may be inseparable.

When naming comes from those who are being named it is more relevant and authentic. It may be an assumption that the new terms that are developed are broadly accepted by the majority of the individuals that may share some of the characteristics. However, that is the nature of self-naming and self-identification. As discussed earlier and explored by Driskill,

the field of anthropology foregrounded Native American gender and sexual diversity as an ethnographic cornerstone for the cross-cultural study of gender and sexuality, while this diversity has been cited as an inspiration for GLBTQ identities and politics across racial and national lines in the United States and elsewhere. These histories form part of the context in which Native American GLBTQ people proposed the community-based term Two-Spirit. Two-Spirit affirmed their belonging to cultural traditions by displacing anthropological terms—noteably berdache—thereby setting a new basis and method for Indigenous knowledge. (Driskill, 2011, p.10).

The literature presented is an outline for the discussion to follow, but it is evident that in the case of Indigenous people’s experiences significant gaps exist. Those gaps are most notably from the voices of Indigenous people directly. In the text *Handbook of Critical and Indigenous Methodologies*, the authors cite the importance of self-authorship and indigenist pedagogies.

Underlying each indigenist formation is a commitment to moral praxis, to issues of self-determination, empowerment, healing, love, community, solidarity, respect for the Earth, and respect for elders. Indigenists resist the positivist and postpositivist methodologies of Western science because these formations are too frequently used to validate colonizing knowledge about indigenous people. Indigenists deploy, instead, interpretive strategies and skills knitted to the needs, language, and traditions of their respective indigenous community. These
strategies emphasize personal performance narratives and testimonios (Dezin, Lincoln, & Tuhiwai Smith, Eds., 2008, p11.).

As researchers document cultural experiences, they filter these experiences through their own cultural paradigm. European and non-Indigenous accounts of Indigenous people’s experiences are rife with perspective limitations. “Not only must they avoid essentialism and its accompanying romanticization of the indigene, but they must also sidestep the traps that transform their attempts at facilitation in further marginalization” (Dezin, Lincoln, & Tuhiwai Smith, Eds., 2008, p.9). These perspective limitations and ethnocentric interpretations poison the early body of literature that lacks untranslated and unfiltered accounts of Indigenous experiences. As this literature review is interpreted in the discussion the cultural bias must be acknowledged and used to shift to a more authentic framework.

**Conclusion**

This review presented the history and concepts of non-binary gender and Indigenous culture across anthropological, sociological, historical, and ethnic studies research. Kessler and McKenna (1978) specifically use the “berdache” status as a reflection of cultural gender and the impact interpretation by non-Indigenous voices has on this experience.

The answer may lie in the language of the people, but if anthropologists interpret that language according to their own concepts then the language analysis is inevitably limited. If anthropologists held the notion of two and only two genders, they would have to translate the culture's term for berdache according to that organizing principle. In other words, the berdache would have to be some variation of a man or a woman. The word chosen for translation necessarily structures our thinking about the berdache (Kessler & McKenna, 1978, p.36).

Referring to the Indigenous terms for different expressions of gender, Fulton & Anderson (1992) stated, “We would argue that these terms refer to a distinct gender—one separate from ‘male’ and ‘female’ (p.607). The term “berdache” was applied to Indigenous people by early explorers, conquistadors, and those hoping to convert them to a religious identification.
Therefore, the labeling of a “berdache” status refers not to an actual lived experience of Indigenous people but to the interpretation of the gender expression by Euro-American cultural values.

Taking the “berdache” status out of the Euro-American binary construct that framed the discourse on Indigenous gender expression and identity of the late twentieth century, Roscoe (1998) wrote,

Berdaches were not failed men or women; they occupied distinct gender roles and behaved according to cultural expectations for those roles. The evidence of multiple genders in North America offers support for the theory of social constructionism, which maintains that gender roles, sexualities, and identities are not natural, essential, or universal, but constructed by social processes and discourses (p.5).

While Roscoe may be considered a controversial figure in the dialogue, the argument presented is also expressed in more contemporary Indigenous and ally voices. As Driskill shares the voice of a Cherokee elder

At our Ceremonial Ground and most others, we have three gender roles for participation; they aren’t enforced, but suggested. Male, female, and other. A woman could live as a male and vice versa, but a third option exists, those that are neither or both. Some folks in other Tribes call it two-spirited, we don’t. We call it asegi udanto or “other heart”; these people are trained in the esoteric arts and Traditional Medicine. Among non-Traditional Cherokees they are now both respected and feared; at one time they were just respected, but with Judeo-Christian influence, they have become feared; almost like witches among some of our own people ["gay people"]. (Driskill, Q., 2011, p.98).

Driskill also supports this with the speakers own reflections in presenting the struggles with terminology and discussions of sexuality and gender in Indigenous culture and history.

The conflation of sexuality and gender expression under umbrella terms like Two-Spirit and queer may further complicate this process. Asking a language speaker or elder whether there is a word for "gay" in Cherokee, for instance, may cause the elder or speaker to say ”no,” However, asking the elders or speakers if there are words for people who live as a gender other than that assigned at birth may bring different answers. Because the historical identities, roles, and expressions we are calling Two-Spirit are primarily about gender role and gender expression--not about what genders a person can fall in love with or are sexually involved
with--there is no singular or simple answer to questions about Cherokee terms for our identities (Driskill, 2011, p.102).

Understanding the influence Euro-American culture has on the presentations of gender in Indigenous cultures is vital to understanding the impact of colonialism and ethnocentrism on previous research.

Although in American society we are taught that girls/women are female and boys/men are male, not all individuals confine themselves to these categories. These examples should also illustrate that the dominant cultural gender ideology does not prevent a suppressed gender ideology from existing, nor does it constrain flexibility in sex, sexuality, and gender variance (Jacobs, & Cromwell, 1992, p.54).

This cultural discussion of flexibility in gender identity, expression, and role may serve as an example of the non-binary gender options that writers like Butler, McKenna & Kessler, and Fausto-Sterling presented.

Current scholars recognize that dialogue both within and alongside Indigenous communities will need to continue.

Our movements must also recenter ourselves to place transgender and gender nonconforming people and issues at the center of Two-Spirit organizing. While many of us understand that many of the “roles” currently being called "Two-Spirit" are not about sexuality but about relationships with gender, much of our work ends up conflating Two-Spirit with gay in ways that often ignore those who should be at the center of our movements; those whose gender identities and expressions fall outside rigid colonial dichotomies (Driskill, Finely, Gilley, & Morgensen, 2011, p. 213).

Keeping only within the binary notions of gender would make it easier to dismiss experiences like Indigenous cultural gender as deviant.

As researchers working with records of cultures that have been destroyed or significantly disrupted by colonial and neocolonial penetration and domination have had to try to interpret whether earlier writers were describing variances from the observers' dichotomous conception of gender, sex, or sexuality or Native (possibly multiple) categories of gender, sex, or sexuality (Murray, 1994, p.59).
If we accept, as McKenna and Kessler (1978) assert, that “gender is the anchor, and once people decide what you are they interpret everything you do in light of that” (p.6) then we may find ourselves grounded in cultural inflexibility. However, if we use the same metaphor and think of gender as our sails, then a new cultural perspective and design may allow us to move more swiftly and to previously unattainable locations in our gendered journey.

As presented in the introduction, this study is the exploration of the inputs like gender and race as they relate to the environments we experience. Colleges and universities provide a unique interaction of cultures and experiences. These experiences may be positive educational opportunities that students expect or they may be harassment and discrimination from other students, faculty or the system itself. The next section explores the research of harassment and discrimination on the outcomes in this study; suicidality and substance use.

**Part Two: Harassment and Discrimination in Education**

The average twenty-five year old in the United States who graduates from college has spent over half of their life in school. If a student adds graduate and professional programs then they have spent over twenty years of their life as part of the educational system. Even for the average high school graduate, the vast majority of their lives-- thirteen of their eighteen years -- were spent in a school environment. It is easy to assume then that the experiences that take place in a school setting have a large impact on the lives of children and young adults. This section includes some of the research on the experiences of harassment and discrimination in the school environment for gender nonconforming and Indigenous youth.

**Gender nonconforming students and incidents of harassment.** Throughout the K-12 system, community colleges and four year institutions including graduate school, students report being the victims of harassment in educational settings due to their gender identity and
expression. Some of this research is embedded in the harassment of lesbian, gay, bisexual, and transgender (LGBT) students as a whole on both sexual orientation and gender expression.

In the 2009 GLSEN National School Climate Survey (GLSEN, 2010) in the K-12 system (n=7,261), “62.6% reported hearing remarks about gender expression (‘not acting masculine enough’ or ‘feminine enough’) frequently at school, 39% felt unsafe at school because of how they expressed their gender, and 63.7% were verbally harassed at school because of their gender expression” (p. xvi). Using a community sample of 97 sexual minority high school students and matched comparison sample of heterosexual students, Williams, Connolly, Pepler, and Craig, (2005) found more reports of bullying, harassment, and depression among LGBT youth.

In The State of Higher Education for LGBT People (2010), LGBTQ respondents were twice as likely to be targets of derogatory remarks (61%); transmasculine, transfeminine, and gender nonconforming (GNC) respondents of color were significantly more likely than men and women of color to experience harassment; and respondents who identified as transmasculine (38%), transfeminine (33%) and GNC (39%) were significantly more likely to seriously consider leaving their institution. In particular, respondents who did not identify with the gender binary of man or woman were at most risk for harassment on college campuses.

In the 2011 publication by the National Gay and Lesbian Taskforce and the National Center for Transgender Equality, Injustice at Every Turn: A Report of the National Transgender Discrimination Survey, those who expressed a transgender identity or gender non-conformity while in grades K-12 reported rates of harassment (78%), physical assault (35%) and sexual violence (12%). For gender nonconforming and trans youth, fifty-nine percent (59%) of respondents said they were harassed or bullied in school at any grade level. Twenty-three percent (23%) said they were physically assaulted in school at any grade level. Eight percent (8%) were
sexually assaulted at school at grade any level. Five percent (5%) were expelled at any grade level.

This research also reported on experiences in higher education specifically. The report states those attending college, graduate school, professional school or technical school reported high rates of abuse by students, teachers and staff, including harassment and bullying (35%) as well as physical (5%) and sexual assault (3%). Two percent (2%) reported expulsion due to their gender identity/expression.

Beemyn & Rankin (2011) refer to several studies that present similar information regarding harassment and bias on the basis of gender identity and sexual orientation including a national study in which 42% of the lesbian, gay, bisexual (LGB) respondents reported the climate least accepting for LGBT people. Two years later another report highlighted that 92% (n=68) of transgender respondents reported they were the targets of harassment due to their gender identity. (Rankin 2001, 2003 as cited in Beemyn & Rankin 2011). Of particular interest to the respondents in this study “GLBT students who are frequently harassed are more likely to say they will not go to college” (Kim, Sheridan, & Holcomb, 2009, p.24)

Indigenous students and incidents of harassment. “Characterized by institutional racism and discrimination, dominant culture has a long history of opposition to Native cultures, and the attempts to assimilate Native people” (Garrett & Pichette, 2000, p.4). These realities are well documented in the recruitment, retention, and experiences of Indigenous students across the educational system.

In both Huffman’s research (1991) and the work of Perry (2002), significant percentages of Native American students reported verbal racism or harassment on predominantly white campuses. Additionally, Belgarde (1992) found that for students with a stronger sense of Native
American cultural identity there was a higher perception of hostility or racism. “Estimates of the attrition rates for Native American students in higher education range from between 75 to 93 percent” (Larimore & McClellan, 2005, p.17). Student persistence therefore is a critical issue for Indigenous students even more so than the non-Indigenous student population. Several factors were identified in studies that have an impact on persistence and include “financial aid, discrepancies between high school and college environments, prejudice, and social isolation” (Larimore & McClellan, 2005, p.20).

In the NGTLF 2001 report, 86% of American Indian and Alaskan Native respondents were harassed in K-12 schools.

American Indian and Alaskan Native respondents who attended school expressing a transgender identity or gender non-conformity reported alarming rates of harassment (86%), physical assault (51%), and sexual assault (21%) in K-12; harassment was so severe that it led 19% to leave school. Eleven percent (11%) were also expelled due to bias. Respondents who were harassed and abused by teachers in K-12 settings show dramatically worse health and other outcomes compared to those who do not experience such abuse. Peer harassment and abuse also had highly damaging effects (NGLTF, 2011, p.2).

One of the significant challenges of exploring the intersection of LGBTQ identity and Indigenous identity and issues of harassment or discrimination is the low response rates in most surveys from this community. For example in the GLSEN Report on 2011 National School Climate Survey, the total sample size was 8,584. Only fifty-five respondents identified in that sample as Native American, American Indian, or Alaska Native. This makes it statistically difficult to draw broad-based inferences about the experiences of these students in the school environment. The small sample may provide data that could be analyzed by some type of qualitative method but a broad application would be inappropriate.
Part Three: Health behaviors in Gender nonconforming & Indigenous communities

For the purposes of this analysis, health behaviors are identified as the self-reported attempt of suicide and use of alcohol and other drugs. Some of the literature focuses on the experience of Indigenous people and substance use, including alcohol and other drugs, as well as suicide. There is also some literature discussing these same behaviors and gender nonconforming people. In much of the literature, transgender and gender nonconforming people are included along with the lesbian, gay, and bisexual community. Some of this literature does not extricate gender or gender identity outside of sexual orientation at all. A summary of these findings are presented below.

Indigenous people and substance use. Alcohol and drug exposure among urban American Indian and Alaska Native adolescents in grades 9-12 is reported in the Youth Risk Behavior Survey. In the 2007 report, nearly 75% of the total survey participants (n=1175) reported consuming alcohol once in their lifetime, and 47% reported currently drinking (had at least one drink of alcohol on at least 1 day during the last 30 days (Ramisett-Mikler, & Ebama, 2011). Native Americans, when compared to other groups, have an earlier age of first involvement with alcohol. (Olson & Wahab, 2006) and Wallace et. al. (2003) reported that almost twenty-five percent of American Indian eighth graders responded that they drank five or more drinks in a single setting in the past two weeks.

Beauvais, Jumper-Thurman, & Burnside (2008) reported that American Indian/Alaska Native youth were significantly higher than whites for two outcomes: having drunk alcohol before age 13 and drinking in school in the past month. They did not find that AI/AN youth differed from whites on lifetime drinking or current alcohol use and heavy drinking. Looking
beyond youth to adult substance use as reported by Dawson, May & Gossage, Grant et. al., and Cohen, Feinn, Arias, & Kranzler (as cited in Ward & Ridolfo, 2011)

among adults, Native Americans are less likely than other racial/ethnic groups to report current use of alcohol and more likely to abstain completely. However, when Native Americans do consume alcohol, they are more likely than other groups to binge drink, report alcohol dependence, and seek (not necessarily utilize) treatment for alcohol misuse (p. 1410).

Ward & Ridolfo’s (2011) findings in their survey of Native American college students show rates of alcohol use among “Native American college students appear to be similar to those among the general college population, the bivariate analyses show that the patterns of use are quite different” (p.1415).

Native American adults and adolescents have also reported higher rates of illicit drug use than all other racial groups. Even using a representative sample from various tribes, “American Indian youth were reported to have higher rates of both lifetime and recent drug use” (Ward & Ridolfo, 2011, p.1411). It is important to note over a longitudinal study spanning thirty years, “the trends in use of a variety of drugs are highly similar between American Indian youth and non-American Indian youth, with corresponding increase and decreases across time... it is clear that American Indian youth have been using marijuana at higher rates than non-American Indian youth” (Beauvais, Jumper-Thurman, Burnside, 2008, p19). Additional findings from the Indian Health Services records as cited in Beauvais, Jumper-Thurman, & Burnside (2008) show a 60% increase in treatment admissions for methamphetamine abuse between 2001 and 2007. This rate is the highest among all ethnic groups in the U.S.

Gender nonconforming people and substance use. Much of the data regarding lesbian, gay, bisexual, and transgender communities and substance use has not focused on gender identity and/or expression, but rather on sexual orientation. Analyzing data from a 1996 report on the
National Household Survey on Drug Use (Office of Applied Studies, 1996), researchers found a moderate elevation of drug use and dependence in gay and bisexual men and women when compared to heterosexual men and women. The report also identified that lesbian women were significantly more likely than heterosexual women to be heavy drinkers (Anderson, 2009). Ridner, Frost, and LaJoie (2006) reported that college students who identified as lesbian or bisexual women were 10.7 times more likely to drink and 4.9 times more likely to use marijuana than heterosexual women.

The Trilogy Project (Skinner & Otis, 1996) was designed to gather epidemiological data on the lifetime, past year, and past month prevalence rates of alcohol or drug use for gay men and lesbians. In this study, higher rates of marijuana, inhalant, and alcohol use were documented for lesbians and gay men when compared to data from the National Household Survey on Drug Abuse (NHSDA). In particular, 87% of lesbians reported alcohol use compared to 64% of women from the NHSDA study, and 84% of gay men used alcohol compared to 72% of the NHSDA male participants (p34).

This comparison to the NHSDA provides an interesting comparison to a large national survey of alcohol and substance use. There are national organizations that have also explored the experiences with substance use for lesbian, gay, and bisexual people. The Center for Substance Abuse Treatment (2001) suggested that “LGB persons are: (a) more likely to use alcohol and drugs than the general population, (b) more likely to have higher rates of substance abuse, (c) less likely to abstain from use, and (d) more likely to continue heavy drinking into later adulthood. For example, 20-25% of gay men and lesbians are heavy alcohol users, compared to 3-10% of [the] heterosexual population” (p.34).

This pattern of alcohol use is also reported in other research. However, this material is dated and should be critiqued accordingly. For example, McKirnan and Peterson (1989) reported alcohol problems for lesbians were greater than those for heterosexual women (23% and
8%, respectively), and they found the same for gay men and heterosexual men (23% and 16%, respectively). In terms of drug use, higher numbers of LGB individuals used cannabis (56%) and cocaine (23%) than the general population (20% and 9%, respectively) (Weber, 2008).

In a more contemporary 2010 study by McCabe et al., “substance use disorders tended to be more prevalent among LGB respondents who reported any discrimination than among those who reported no discrimination” (p.1948). This study was unique in that it examined discrimination by sexual orientation, race, and gender. Nearly half of LGB adults who reported discrimination on the basis of gender, race/ethnicity, and sexual orientation in their lifetimes met the criteria for past-year substance use disorders, compared with less than 1 in 5 of those who reported no discrimination (p.1949).

In the 2008 study by Weber, “Participants who had an alcohol use disorder, drug use disorder, or both disorders experienced more heterosexist events and internalized homophobia than those who had no disorder, but this finding should be interpreted with caution due to the very small effect size” (p. 41).

While this data does not identify transgender and gender nonconforming identity as an analysis group, the connections between sexual orientation, race and gender lend strong support for the interconnectedness of oppression for LGB people.

Focusing on research that identifies gender nonconforming people (transgender, gender queer, transsexual), Clements, Marx, Guzman, Ikeda, and Katz (1998), in their study of transgender persons in San Francisco, found that 34 percent of the Male to Female (MTF) population and 18 percent of the Female to Male (FTM) population reported lifetime IV drug use.
In the 2012 National Gay and Lesbian Taskforce’s *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*, questions regarding substance use for transgender people were further analyzed.

Eight percent (8%) of study participants reported currently using alcohol or drugs specifically to cope with the mistreatment that they received as a result of being transgender or gender non-conforming, while 18% said they had done so in the past but do not currently. We did not ask about general use of alcohol and drugs, only usage which the respondents described as a coping strategy for dealing with the mistreatment they face as transgender or gender non-conforming persons. (NGLTF, 2011, p.81)

In discussions of LGBT issues in health and health related behaviors like substance use, social factors are often reviewed for the potential impact on this community.

Societal factors affecting LGBT health include legal barriers in access of health insurance, employment, marriage, adoption, and retirement benefits; lack of protection from bullying at school and work; and a shortage of health care providers who are knowledgeable about LGBT health issues and capable at delivering culturally competent care (McKay, 2011, p.394)

In addition, other factors that impact LGBTQ people, such as employment discrimination and income disparity may increase the risk of LGBTQ people to use substances. In the NGTLF survey, respondents who participated in what they called the “underground economy” of sex work and drug sales were more than twice as likely to use substances. In this sample, 19% of these respondents were currently using alcohol and/or drugs while 36% reported that they had done so in the past. Those individuals who were the targets of physical violence had a higher rate of current drug use (15%), as did those who had been sexually assaulted due to bias (16%). Also at elevated risk were those who had lost a job due to discrimination: 12% reported currently using drugs and alcohol, while 28% had done so in the past.

**Indigenous people and suicidality.** The second element of health behaviors as defined in this study is suicide attempts, also referred to as suicidality. In 2000, as reported by the Centers for Disease Control (CDC)/National Center for Health Statistics, the suicide rate for
American Indians was 12.2 per 100,000 persons, versus the national overall rate of 6.1, and was the second leading cause of death among those 15-34 (Lanier, 2009). According to the Urban American Indian and Alaska Native Youth Risk Survey results from 1997-2003, the presence of risk factors including suicidal behaviors were threefold higher in AI/AN youth compared to white youth in urban areas (Rutman, Park, Castor, Taualii, & Forquera, 2008). They also report that the prevalence of suicide ideation and behaviors among AI/AN youth were significantly higher than in white youth in four of the five measures used in their study.

The statistics for American Indians/Alaska Natives continue to be higher than the average. In the years following 2003 suicide was the leading cause of death among all youths and young adults aged 10-24 in the United States, with Native American male adolescents having a higher suicide attempt rate than African American, Asian American, and Caucasian American female adolescents (Langhinrichsen-Rohling, Friend & Powell, 2009). The Bureau of Indian Affairs report in 2001 found that approximately 12.2% of Native American male high school students and 19.3% of female high school students attempted suicide one or more times in the 12 months preceding the survey (Bureau of Indian Affairs, 2001).

By 2005 the rate of suicide for Native American youth rose to 16.9 per 100,000 people. A very interesting finding is the gender ratio between Native American males and females. The ratio is smaller than all other ethnic categories. “Specifically, Native American female adolescents have a higher suicide death rate than African American, Asian American, and Latino American male adolescents” (Langhinrichsen-Rohling, Friend & Powell, 2009, p.406). In reference to American Indian students, Muehlenkamp, Marrone, Gray, & Brown (2009) presented the results from the 2005 American College Health Association which found that
“approximately 15% of all American Indian students reported seriously contemplating suicide over the past 12 months, compared with 9.1% of non-American Indian students” (p.134).

These various areas come together in several publications. A 2009 report from the Center for Disease Control and Prevention and reprinted in the Journal of the American Medical Association published the rates of suicide and alcohol use among various racial and ethnic groups covering seventeen states for 2005-2006. This report supports the previous discussion of alcohol use within Indigenous communities, but also makes the connection with substance use and suicide ideation. May et.al. “explored the relationship between alcohol and suicide among American Indians of New Mexico from 1980-1988 and found that male suicides were more likely to involve consumption of alcohol than female suicides” (as cited in Langhinrichsen-Rohling, Friend & Powell, 2009, p.408).

Gender nonconforming people and suicidality. Research regarding gender nonconforming youth is mostly imbedded within the literature of lesbian, gay, bisexual research. A few examples of the impact of gender nonconforming identities and/or behaviors are identified. According to McGuire, Anderson, Toomey, and Russell (2010), "the cumulative literature suggests that some transgender youth face significantly more mental health difficulties, such as depression, anxiety, and self harming behaviors…than their gender conforming peers" (p.161). The few studies to include transgender youth have been cross-sectional, but also indicate a greater risk for suicidal ideation and self-harm (Liu & Mustanski, 2012).

When reviewing literature to those studies of LGBTQ people, a particularly interesting finding is that school victimization mediates the strong link between gender and negative mental health-- depression and suicidal ideation. Liu & Mustanski’s (2012) results show that males' elevated depression and suicidal ideation scores can be explained once their disproportionate
rates of victimization are taken into consideration. An important precursor to suicide attempts is suicidal ideation. In one epidemiologic study, approximately 17% of adolescents in the U.S. endorsed experiencing suicidal ideation over the prior 12-month period (Liu & Mustanski, 2012).

As these mental health difficulties related specifically to suicide, LGBT young adults who reported high school victimization during adolescence were 2.6 times more likely to report depression above the clinical cutoff and 5.6 times more likely to report having attempted suicide at least once, and having a suicide attempt that required medical attention (Russell, Toomey, Diaz, & Sanchez 2011, p.227).

Additionally, this report suggests that “taken as a whole, the prior research suggest that school-related victimization in middle and high schools has a negative consequence, and that bias-motivated victimization, in particular, may compromise mental health” (Russell, Toomey, Diaz, & Sanchez, 2011, p.224) and that the negative consequences of bullying appear to be worse when bullying is motivated by bias or prejudice. Of particular relevance to this analysis, Russel et. al. found no “statistically significant difference in LGBT school victimization based on ethnicity, immigrant status, or socioeconomic status, heavy drinking or substance use-related problems in young adults” (p.227).

Heck, Flentje & Cochran (2011) also found that the “victimization of youth at school is a factor associated with negative mental health outcomes for LGBT individuals” (p.162). Williams, Connolly, Pepler, and Craig, (2005) found more reports of bullying, harassment, and depression among LGBT youth. Victimization as a negative influence and social support as a positive influence, were found to impact the associations between sexual orientation and psychological distress; these findings highlight how school environments can relate to both positive and negative mental health outcomes (p.162).

D'Augelli, Pilkington, and Hershberger (2002), collected data from 350 LGB youth and young adults ages 14-21 and found that high school victimization experiences were associated
with current mental health problems. Specifically, 9% of the variance in mental health symptoms was accounted for by at-school victimization, while 92% of the sample was between the ages of 18-20, suggesting that the effects of at-school victimization may extend beyond the high school years and impact psychosocial adjustment.

**Chapter Conclusion**

The first section of this review of literature discussed the social constructions of gender and race. Grounding these concepts in a social construction lens, research was presented supporting the development of social identity as created by the communities and/or societies that exist around us. Certain communities as presented in the section on Indigenous peoples highlighted a focus on gender through a non-binary lens. This literature illuminated the possible realities of race and ethnicity specific to Indigenous people. These aspects of the literature will align with the discussion of inputs in the following research. The second section presented the literature regarding negative educational experiences as it relates to gender nonconforming and Indigenous people. In particular, this included experiences with harassment, mistreatment, bias, and other barriers that were found to be particularly challenging for Indigenous communities. These topics will align with the discussion of environmental factors presented in the research. The final section included literature on substance use and suicidality within specific populations of gender nonconforming people and Indigenous people. The limited number of studies on gender nonconforming people outside of including lesbian, gay, and bisexual people and these topics made a comprehensive presentation difficult. However, there is some information that helps to align these topics in the outputs of the research project.

Overall, the quantity and relevancy of articles makes a literature review related to these topics uniquely challenging. There are concerns about the voices presented and the limitations
of the few Indigenous voices presented in related literature. Additionally, concerns exist about the impact of colonialism on the truth in historical documentation of tribal experience related to gender identity. There are also concerns about the applicability of binary gender-related models and theory on non-binary gender identity. While these limitations exist, what remains provides significant grounding to discuss the research questions and relevant findings.
Chapter 3: Methodology

Introduction

As stated in the introduction, the purpose of this study is to provide more insight into transgender and gender queer Indigenous people’s experiences in education and the impact on health behaviors. The focus of the primary research sponsored by the National Center for Transgender Equality and the National Gay and Lesbian Task Force was to address the lack of empirical data on anti-transgender discrimination (NGLTF, 2011). This research project is a secondary analysis of the NTDS Public Use dataset from the National Transgender Discrimination Survey (NTDS). This analysis utilized quantitative data related to ethnic identity and gender identity and the impact of harassment, discrimination and violence in schools on potentially negative health behaviors specifically substance use and suicide. In the following content the term “primary cleaning” refers to the collection, cleaning, and recoding that was done prior to the analysis for this research. Reference to secondary cleaning and coding refers to processes taken place in addition to the primary coding and cleaning done for the purposes of this analysis.

The first question provides some foundational information for the study about the experiences of Indigenous gender nonconforming people and harassment and discrimination in schools within this survey population.

2. What is the relationship between identifying as American Indian/Alaska Native within this survey population and the reporting of harassment and discrimination in schools?
3. Does harassment and discrimination in schools of American Indian/Alaska Native gender nonconforming people impact reported suicide attempts?

4. Does harassment and discrimination in schools of American Indian/Alaska Native gender nonconforming people impact reported substance use?

The data was analyzed to test these three research questions using both descriptive and inferential statistical methods including binary logistical regression. This chapter presents the research design; population and sampling techniques of the original survey; external validity; measurement reliability and validity; data collection and cleaning methods; data analysis methods used for the research questions; and limitations.

It is important to note that throughout this section the term “gender nonconforming” will be used. This term by its use assumes that there must be a standard to which the individuals are not conforming too. That standard is often the broad social construct of the United States and dominated by white Euro-American discourse. Therefore, one might argue that Indigenous participants may not be “nonconforming” by Indigenous cultural standards. However, for the purposes of this study. and the use of the language in the actual instrument, this term will be used here.

**Research Design**

The analysis of this data will be done using a quantitative data analysis process, specifically, binary logistic regression. In this analysis the questions are best answered by this specific method due to the binary nature of the outcome variables. By transforming the substance use variable into a binary category from the original responses, the two variables of suicide attempts and substance use can be entered in to the same model. It is also worth noting the importance of having data that can be analyzed in these statistical measures. While
qualitative analysis of data such as interviews or ethnographic material offers a deep exploration of topics, it does not allow for a rigorous discussion of relationships and influence of variables on one another. It is important to provide data that can accomplish this task to create cornerstones for institutional change.

The conceptual framework used in this secondary analysis is Astin’s Input-Environments-Output Model. The model is made up of three components. The first is inputs. Inputs according to Astin (1991) refers to the qualities, skills, and identities that a person brings into the assessment environment. Outputs then are the impact of the program, initiatives, and exposure to these environments. In a higher education setting this could be the measure of academic success, as an example. The last component is environment. Environment refers to the actual experience of the individual. In some more formal research situations this could be controlled testing rooms. In social science research, controlled environments are not always possible. Other examples of environments are the individual’s interactions with peers, participation in leadership, and experiences with bias and discrimination. A simple chart below from Astin (1991) is included to further inform this model description.

![Figure 3.1 The I-E-O Model](image)

FIGURE 3.1 The I-E-O Model. This figure illustrates the relationship of the I-E-O model developed by Astin.

The I-E-O Model is helpful as a framework for this secondary analysis because of the comprehensive inclusion of not only the vital inputs of identity, but also due to the capacity to explore the impact of the environmental factors. As Astin (1991) offered, “the basic purpose of
the I-E-O design is to allow us to correct or adjust for such input differences in order to get a less biased estimate of the comparative effects of different environments on outputs” (p. 19). While this secondary analysis does not allow for the correction of these different environmental pieces, it does allow for the discussion of the impact of those on the outputs related to healthy behaviors.

This model also offers an integrated analysis of the complex nature surrounding the experiences of students in college. Many campuses spend valuable resources to define the student experience and determine the formula for student success. A model that integrates culture, identity and experience into the formula may provide a more robust picture, better prepared to adapt to change and external influences. If institutions apply systems in isolation or with limited acknowledgement of our integrated dynamics, a student may feel forced into isolated identity categories and feel less able to navigate the challenges of the college experience.

Lastly, this model also allows a visual depiction of possible relationships in a manner that allows for a clear perspective of where interventions may be appropriately placed. It may be clearer once we attribute the source of a barrier within one of these categories—input, output or environment—to identify the aspects that can be controlled or modified.

Figure 3.2 presents the research questions in a graphic format with inputs (race/ethnicity & gender identity), environments (negative educational experiences), and outputs (health behaviors).
Description of the Sample

Participants. Given the difficulty of finding significant numbers of people who identified with the context of the survey (transgender people), the survey researchers used a non-probability convenience sampling technique of venue-based sampling and snowball sampling. More about these sampling methods will be addressed in the data collection section. The primary data collection resulted in 7,521 responses. The primary cleaning of the original data set resulted in a reduction of the original sample size from 7,521 to the final 6,456 respondents.

For this analysis the theoretical population of Indigenous people will be described using the 2000 census numbers. Based on a U.S. population of just over 301 million people, 2.4 million individuals surveyed for the census project identified as Native American/Alaska Native. Therefore in a very rough estimate, less than one percent (.79%) of U.S. residents reporting in
the 2000 Census report identified as “Native Americans.” The study population is defined as the members of the theoretical population who can be accessed.

However, this does not take into consideration the numbers of American Indians/Alaska Natives who identify as transgender or gender nonconforming. An effort at quantifying the transgender and gender nonconforming community with a large scope similar to the U.S. Census has not been undertaken. Therefore there is not a source to compare specific sample populations using data of a similar size. However, in another large data collection effort as reported in Beemyn & Rankin’s (2011) *The Lives of Transgender People*, of the 3,474 respondents completing the survey approximately 4% (n=145) reported a racial identity of American Indian or Alaska Native.

The data used to create the gender variable for this secondary analysis are responses from the primary collection questions two, three and four. Question two asks for a report of assigned sex at birth on the respondent’s original birth certificate into either Male (n= 3,870) or Female (n=2,566). Question three asks for the respondents to select a primary gender identity today from: “Male/Man”, “Female/Woman”, “Part time as one gender, part time as another” referred to as Part time gender in Table 3.2 and “A gender not listed here, please specify”.

Table 3.1
<table>
<thead>
<tr>
<th>Primary Gender Identity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male/Man</td>
<td>1687</td>
<td>26.2</td>
</tr>
<tr>
<td>Female/Woman</td>
<td>2608</td>
<td>40.5</td>
</tr>
<tr>
<td>Part time Gender</td>
<td>1275</td>
<td>19.8</td>
</tr>
<tr>
<td>A gender not listed here</td>
<td>864</td>
<td>13.4</td>
</tr>
</tbody>
</table>
The recode of these answers into the variable complexgender, from the primary recoding, as reported in Table 3.2 includes the write-in responses included as part of “A gender not listed here” from question three. MTF is Male to Female transgender people. FTM is female to male transgender person. Male to other GNC and female to Other GNC refers to those individuals who do not identity with the gender assigned when they were born and do not identity as entirely male or female during/after transition.

Table 3.2
Reporting of Demographic Data: Recode Complexgender

<table>
<thead>
<tr>
<th>Current Gender Identity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTF Trans</td>
<td>3005</td>
<td>46.7</td>
</tr>
<tr>
<td>FTM Trans</td>
<td>1776</td>
<td>27.6</td>
</tr>
<tr>
<td>Male to Crossdress Female</td>
<td>702</td>
<td>10.9</td>
</tr>
<tr>
<td>Female to Crossdress Male</td>
<td>192</td>
<td>3.0</td>
</tr>
<tr>
<td>Male to Other GNC</td>
<td>169</td>
<td>2.6</td>
</tr>
<tr>
<td>Female to Other GNC</td>
<td>597</td>
<td>9.3</td>
</tr>
</tbody>
</table>

The complexgender variable was then recoded in the primary process to eliminate all those who identified as crossdressers. For the purposes of this study they are not included in the definition of gender nonconforming. While cross-dressing certainly can be defined as a gender nonconforming behavior, for the purpose of this study cross-dressing as a behavior will not be included. It cannot be assumed that the individual cross-dressing has a gender nonconforming self identification outside of the cross-dressing behavior. Therefore, this recoding created a two category variable “Current Gender Identity” with Trans (n=4781) and Gender Nonconforming or GNC (n= 766). The variable used for this secondary analysis then recoded Current Gender Identity into a two-category variable labeled TransGNC. The two labels for this recode are
TransGNC (n=5547) or Not Trans Gender nonconforming (n= 909). For this analysis, only those identifying as transgender or gender nonconforming were included.

The last relevant demographic variable of this analysis is the educational level attained. Participants were asked to select one option to denote the highest level of school they have completed. There was a large percentage of respondents reporting “Some college credit but less than 1 year” or higher. Due to the values needed for the analysis and the focus of research questions, only those respondents who reported at least some college or higher are included (n=5611).

In creating the new race variables, all participants who selected American Indian/Alaska Native were included in the secondary analysis group American Indian/Alaska Native regardless if they selected another racial identity. This process mirrors the U.S. Census practice of creating an “American Indian or Alaska Native in Combination” group (U.S. Census Bureau, 2009, p.3). According to the 2000 Census report on American Indian and Alaska Native populations (2002), the largest other racial/ethnic category selected alongside American Indian/Alaska Native is white at 0.4% (n=1,082,683). The next largest group was black or African (0.1%) and other races (>0.1%). In census data collection, the largest number was American Indian/Alaska Native alone at 0.9% (n=2,475,956).

Since the population who report solely as American Indian/Alaska Native was small in the collected data, the combined racial category allows for some analysis of data that would not be possible otherwise. Clearly, with multiethnic individuals, one racial identity may be more salient than another. For the purposes of this analysis, interpretation of the results should reflect the influences monoracial/biracial identity has on responses. Other factors such as tribal
affiliation, reservation versus urban home culture, and intersections with other identities should be part of the context of interpretation.

**Instrumentation**

The survey instrument utilized in this analysis consisted of 70 questions; however, #68 was skipped in the final primary instrument. The questions covered a range of topics including demographic identification, experiences in employment, education, health care, family life, places of public accommodation, jail or prison, homeless shelters, housing, and interactions with police. “There were a variety of question types used throughout the survey, including single-choice items, check-all items, matrices, and some write-in options. Including recoded variables, these questions produced 578 variables for the public use dataset” (NGLTF, 2011, p11).

The survey instrument included information for the participants on the purpose and procedures, and informed potential participants about the possible discomforts, risks, and benefits of participating. The information concluded with a statement of confidentiality and reinforced that participation in the survey was voluntary and where to direct any questions. Demographic questions included several questions about gender identity and sex as well as questions regarding race/ethnicity, education, household income and family status, and employment status.

For the purposes of this secondary analysis the following responses are being used and are also listed in Table 3.3. The demographic/population questions identified in the previous section (Gender Identity, Race/Ethnicity, and Educational Level) and additional questions from the instrument each beginning with the wording: “Because you are transgender/gender nonconforming, have you been a target of harassment, discrimination or violence at school?” and
the instructions to mark all that apply. Four questions using this wording mirrored the categories in the demographic section regarding educational level.

The next question utilized was “Because I am/was transgender/gender nonconforming, which of the following statements are true?” The areas covered were overall harassment, financial reasons/financial aid, housing, and gender inclusive facilities.

The last two questions used in this analysis are the outcomes of suicidality and substance use. Suicidality is based on Question 54, “Have you ever attempted suicide?” Substance use is based on Question 50, “I drink or misuse drugs to cope with mistreatment I face or faced as a transgender or gender non-conforming person”.

Table 3.3
Legend for Variables

<table>
<thead>
<tr>
<th>Demographics</th>
<th>TRANSGNC= Current Gender Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AI/AN,- American Indian/Alaska Native race/ethnicity group</td>
</tr>
<tr>
<td></td>
<td>WHITE- white identified race/ethnicity group</td>
</tr>
<tr>
<td></td>
<td>POC- people of color racial group, excluding AI/AN</td>
</tr>
<tr>
<td>Experience in Schools</td>
<td>OBSTACLES- Combination of questions 44-46 regarding leaving school due to harassment, financial, and space concerns related to gender.</td>
</tr>
<tr>
<td></td>
<td>HARASSMENT-combination of question 39 D, E, &amp; F- Because you are transgender/gender nonconforming, have you been a target of harassment, discrimination or violence at school? For college, graduate or professional school and/or technical school.</td>
</tr>
<tr>
<td>Heath Behaviors</td>
<td>SUBUSE- Alcohol or drug use to cope with mistreatment</td>
</tr>
<tr>
<td></td>
<td>SUICIDE- Ever attempted suicide</td>
</tr>
</tbody>
</table>

Reliability

Information on reliability focuses on the correlation coefficients and the stability of the instrument, as provided here by Rankin and Associates (2002) for the original data collection.

Internal Consistency of Responses.
Correlation coefficients between $r = .45$ and $r = .60$ were generated when examining responses of ratings of campus climate (e.g. homophobic versus non-
homophobic) and likelihood of harassment. The survey was designed to have respondents provide information about their personal campus experiences (reliability coefficient = .84), their perception of the campus climate ($r = .81$), and their perceptions of institutional actions including administrative policies and academic initiatives regarding diversity issues and concerns on campus ($r = .74$).

**Stability of the instrument.**
To avoid unreliability, evaluators must ensure that instruments are properly worded and administered in a consistent manner. The wording issue is important - i.e., to have questions and response choices worded in such a way that they elicit consistent responses. The instrument has been revised numerous times, defines critical terms, and has had "expert evaluation" of items (in addition to the internal consistency checks).

**Validity**

For the measurement validity of the instrument, a four component process was used; validation process, subject matter experts, pilot student, and factor analysis. This information is provided directly from the original data collection report as well (Rankin and Associates, 2002).

**Development of Research Items.** The survey questions were constructed utilizing the work of Hurtado (1999), Gross and Aurand (1999), and Rankin (1994) and further informed by instruments reviewed in a meta-analysis of GLBT climate studies (Rankin, 1998). The final survey contained 45 questions and an additional space for respondents to provide commentary. The survey was designed to have respondents provide information about their personal campus experiences on campus regarding diversity issues, their perception of the climate for diversity, and their perceptions of institutional actions including administrative policies and academic initiatives regarding diversity issues and concerns on campus. The survey was modified into a machine-readable format and input into an on-line format. Institutions had the ability to use a paper/pencil survey, an on-line survey, or both formats in their data collection.

**Consultation with Subject Matter Experts.** The survey instrument was reviewed by several researchers working in the area of diversity (e.g. Terrell Jones, Associate Vice Provost for Educational Equity at Penn State; Patricia Hopson Shelton, Executive Director of the Social Equity Office at Millersville University), as well as higher education survey research methodology experts (e.g. Lee Upcraft, Pat Terenzini). The survey was also reviewed by members of underserved constituent groups (e.g. persons of color, persons with disabilities, etc.)

**Conduct of Pilot Study.** Pilot study was conducted at home institution of principal investigator.
Conduct of Factor Analysis. Three "scales" were unearthed through a factor analysis of the data and a content analysis of the comments provided by participants in the national study (n=1757). These included "Personal Experiences", “Perceptions of Oppression”, and "Institutional Actions". A model for transforming climate for underserved populations on campus was developed through this analysis.

On the issue of content validity, the original researchers made decisions grounded in a review of literature (meta-analysis), pilot work, and input from focus groups. The items and response choices they devised was based on this work, and the researchers felt the instrument would produce a reasonable sample of all possible responses, attitudes, and behaviors. Lastly, on the issue of construct validity the original researchers spoke to the issues of impact and outline validity;

The extent to which scores on an instrument permit inferences about underlying traits, attitudes, and behaviors. Of course, this is the intent of doing the research. I believe that I am justified in drawing these inferences, particularly in light of the factors "falling out" and, similarly, the comments from focus groups.

Ideally, one would like to have correlations between responses and known instances of harassment, for example, but the whole point is that there is no reliable data available. The important issue (in addition to the content validity description above) becomes the manner in which questions are asked and response choices given - both must be non-biased, non-leading, non-judgmental. In particular, one must attempt to avoid socially-acceptable responding. Drs. Terenzini and Upcraft felt this was accomplished. (Rankin & Associates, 2002).

Data Collection Procedures

The NCTE/NGLTF survey research involved transgender and gender nonconforming people in the United States. Participants were asked to complete a survey about their experiences with issues of discrimination. The original survey was made available online and in print in both Spanish and English and was fielded for six months, from September 2008 through March 2009. “For purposes of this study, ‘transgender’ was defined broadly to include those who transition from one gender to another (transsexuals), and those who may not, including gender queer people, cross-dressers, those who are androgynous, and those whose gender non-
conformity is a part of their identity. Because the term ‘transgender’ is understood in various ways that may or may not include these groups of people, broader gender non-conforming language was used to ensure broad participation in the survey” (NGLTF, 2011, p12).

The researchers e-mailed information about the project and an invitation to participate to more than 800 transgender-led or transgender serving community-based organizations and 150 active online community listservs. “Two thousand paper surveys were made available to organizations that serve hard-to-reach populations — including rural, homeless, and low-income transgender and gender non-conforming people. The survey was available in English and Spanish in both online and paper version. Phone outreach efforts to these organizations were conducted for three months while the survey was in the field. The final study sample includes 6,456 valid respondents from all 50 states, the District of Columbia, Puerto Rico, Guam and the U.S. Virgin Islands. The geographic distribution generally mirrors that of the U.S. general population. Roughly 6,000 of these respondents had submitted surveys online and 500 respondents had submitted paper surveys (NGLTF, 2011, p12).

Sampling Procedure

As mentioned previously, identifying participants took place by using two convenience sampling methods; snowball and venue sampling. The term convenience sampling is used in two ways “first, whenever the accessible population is not representative of the theoretical the result is called a convenience sample, even if all of the members of the class, club, or clinic were assessed. Second, the sample is also one of convenience if the participants are volunteers or selected from the population in a nonprobability manner” (Gliner, J., Morgan, G., & Leech, N., 2009, p.125). Snowball sampling “is a modification of convenience or accidental sampling that is used when the participants of interest are from a population that is rare or at least whose members are unknown to you. These might be persons with unusual attributes, beliefs, or behavior patterns, and that do not belong to known groups with identifiable lists of members” (Gliner, J., Morgan, G., & Leech, N., 2009, p.125).
Venue and snowball sampling are exceptionally appropriate, due to the difficult nature of locating subjects who identify as transgender and gender nonconforming to participate in this research. This method is also appropriate because it allows members in marginalized communities to share access with friends and family. As it relates to the specific elements of this study and those who identify as Indigenous people, methods that provide community distribution can be most effective. The final sample only includes those who identified as transgender or gender nonconforming in some way.

**Data Cleaning and Coding**

**Primary survey cleaning/coding.** As outlined above, cleaning of the original data set resulted in a reduction of the sample size from the original 7,521 to the final 6,456 respondents. The cleaning was done in three stages. In the first stage those who “indicated that they were not taking the survey in earnest or were answering the questions illogically, such as by strongly agreeing with each term in Question 4” (NGLTF, 2011, p.14) were removed. The second phase consisted of removing those who stated that they were not transgender or gender nonconforming. The last phase included removing incomplete surveys, duplicates, those who did not give consent, and “respondents were also removed if they stopped before answering Question 5” (NGLTF, 2011, p14).

The responses were also initially recoded to address write-in options. Write-in responses were examined and where possible recoded into existing categories, or categories were created to include responses. Also, recoding was done to address skip logic errors. The survey used the following skip logic. “Respondents were automatically skipped past questions that did not pertain to them based on their answer to a particular question. On the paper version of the survey, written instructions were included to direct survey respondents around questions that do
not apply to them based on their responses. However, respondents did not always follow these instructions. Recodes of the variables based on skip logic were done to remove those who filled out those questions in error” (NGLTF, 2011, p.14). Recodes were created to collapse variables, put variable categories into larger groups, and to remove “not applicable” responses and skipped questions.

In addition, a new category for gender was recoded from questions two, three and four to create a six category current gender identity variable. As outlined in the original dataset codebook (NGLTF, 2011), the six categories are based on sex assigned at birth, current gender, and to what degree terms listed in question four applied to the respondent. Generally, responses to question two, question three, and question four, including the write-in responses, were coded as follows:

- **male-to-female (MTF) transgender:**
  - male in q2 AND female in q3 – OR – male in q2 AND strongly identify with the terms transgender, transsexual, or MTF in q4
- **female-to-male (FTM) transgender:**
  - female in q2 AND male in q3 – OR – female in q2 and strongly identify with the terms transgender, transsexual, or FTM in q4
- **male to cross dress female:**
  - male in q2 AND strongly identify with the term cross dresser in q4
- **female to cross dress male:**
  - female in q2 AND strongly identify with the term cross dresser in q4
- **male to other, gender nonconforming, part time:**
  - male in q2 AND strongly identify with the terms gender-non conforming, genderqueer, androgynous, and all other terms listed except otherwise specified on this list
- **female to other, gender nonconforming, part time:**
  - female in q2 AND strongly identify with the terms gender-non conforming, genderqueer, androgynous, and all other terms listed except otherwise specified on this list

Those who selected terms to the degree of “somewhat” in question four were coded according to the above scheme; however, substituting “somewhat” where “strongly” appears above. From this recoding a new variable label with six categories for complexgender was
created with response values of mtf trans, ftm trans, m to crossdress f, f to crossdress m, m to O GNC/part time, and f to O GNC/part time. The next step was to take these categories and recode them into a new two category variable called tggnc. In this new variable a trans response value includes all mtf trans or ftm trans in complexgender. A response value of GNC includes all male to other, gender nonconforming, part time OR female to other, gender nonconforming, part time from the variable complexgender.

**Additional data cleaning/coding.** Additional data recoding was needed for the purpose of this study. In this secondary recoding, the first recode was the creation of a new gender variable called TransGNC. TransGNC was created by recoding the tggnc variable from the original two response of either trans or GNC into a two variable response of TransGNC or Not TransGNC. This creates a variable where all participants who would be described as gender nonconforming for the purposes of this study, including trans identified people, are known.

The second recode created three racial/ethnic identity categories. The three categories in a new variable of race are created out of question eleven: “What is your race or ethnicity?” The first group, any individual who selected American Indian/Alaska Native, is recoded into the variable label AI/AN. This would include any respondent who selected American Indian/Alaska Native regardless of any other selection in this question. The second group combines any individual who selected at least one of the five other ethnic identities from survey question number eleven (Black or African American, Hispanic or Latino, Asian or Pacific Islander, Arab or Middle Eastern, and/or Multiracial or Mixed race) into a new variable label called People of Color (POC). This group can include those individuals who selected any of these groups as well as white. The last group in this recode is any respondent who selected only white in response to
question eleven. This creates a new variable label of respondents who only identify as white (WHITE).

Limitations

When utilizing survey methodology, several limitations should be acknowledged regarding the applicability to generalized responses, authentic reporting of experiences, and instrumentation. First, the limitations of the data collection methods are important because convenience sampling methods do not allow for the ability to generalize responses to the larger population. The study was also limited to people who participated in the 2010 National Survey on Transgender Experiences of Discrimination in the U.S. Therefore, the participants are only those who received the notification of the survey, to those who had access to a computer to participate or were in a location where a paper form was available and to those respondents where English or Spanish was a language they felt fluent enough in to participate in this research. This survey is also limited to those who felt they fit into the category of transgender as the survey title asked for those to identify as “transgender and gender non-conforming people in the United States” (Rankin & Tanis, 2009).

This particular analysis is limited to those individuals who responded that they had attended at least some college. This was further limited to those who has attended a community college or above for any length of time. There are limitations in reference to the three racial/ethnic categories created, specifically the category of American Indian/Alaska Native. This group includes any individuals who selected American Indian/Alaska Native on the survey question, including those who selected other racial/ethnic groups. There is no way to know from each response what the experiences are of those people. Some of the respondents may have a very culturally connected experience to their Indigenous identity. Others may have a racial
experience more closely associated with an additional race or ethnicity. There will have to be a thoughtful approach to any applications of this research as it relates to this limitation.

Additionally, a researcher must assume that the respondents provided honest and accurate responses to the survey questions. While this seems fairly straightforward, it must be acknowledged that some of the questions ask personal information that could feel intrusive. There is the possibility that this could impact the openness of the survey respondents.

Data Analysis Procedure

Of the seventy questions, I have identified five variables to examine as part of my research. The first is the recoded variable TransGNC which includes all individuals who identify as transgender and gender nonconforming as outlined in the variable recode statement. The variable data is nominal with two options: TransGNC or Not TransGNC.

The second variable is the response to the question “What is your race/ethnicity?” The instructions for the response offer the option to mark all that apply. Possible responses include White, Black or African People, American Indian or Alaska Native, Hispanic or Latino, Asian or Pacific Islander, Arab or Middle Eastern, Multicultural or mixed race. The response American Indian/Alaska Native also included string options to report tribal affiliation.

The third variable is educational experiences. This variable is derived from two question sections. This first question is “Because you are transgender/gender non-conforming, have you been a target of harassment, discrimination or violence at school?” and for each of Elementary School, Junior/Middle School, High School, College, Graduate or Professional School, Technical School. Respondents could select all that apply from the following list:

- Did not attend such a school
- Not out as transgender or gender nonconforming at that point
- Harassed or bullied by students
- Harassed or bullied by teachers or staff
• Physically assaulted or attacked by students
• Physically assaulted or attacked by teachers or staff
• Sexually assaulted or attacked by students
• Sexually assaulted or attacked by teachers or staff
• Expelled, thrown out, or denied enrollment
• Not applicable. I did not experience these negative outcomes

The responses “Did not attend such a school”, “Not out as transgender or gender nonconforming at that point”, and “Not Applicable. I did not experience these negative outcomes” were removed because they did not fall into affirmative responses for the purposes of identifying individuals who had experienced discrimination, harassment or violence in school. After reviewing the crosstabs results for each of the recoded racial categories on the remaining questions regarding harassment, discrimination, and violence in schools, only the questions regarding harassment or bullying met the threshold of twenty responses for further analysis. Therefore six questions remained, two for each level of schooling that asked about being harassed or bullied by students and being harassed or bullied by teachers. Each affirmative response was scored as a one. A new variable was created (Harassment) with a minimum score of zero and a maximum score of six.

The second section of questions related to negative educational experiences asked respondents “Because I am/was transgender/gender non-conforming, which of the following statements are true?” with the option to select “Yes, No or Not Applicable” for each question to the following:

• I had to leave school because the harassment was so bad.
• I had to leave school for financial reasons related to my transition.
• I lost or could not get financial aid or scholarships.
• I was not allowed to have any housing on campus.
• I was not allowed gender appropriate housing on campus.
• I was not allowed to use the appropriate bathrooms or other facilities.
For each of these options a response of yes received a one and a response of no or not applicable received a zero. Therefore, responses could range from zero to six for these questions. These were then added together to create a new variable labeled “Obstacles.”

The fourth variable is the first of two outcome variables. Respondents answered yes or no to the following question: “Have you ever attempted suicide?” The fifth and final variable is responses to the question: “I drink or misuse drugs to cope with the mistreatment I face or faced as a transgender or gender non-conforming person.” The available answerers were “Yes, Yes, but not currently, No, and Not Applicable, I face no mistreatment.” This variable was recoded to eliminate all of the not applicable responses to create a dichotomous variable of Yes or No.

To ensure that the sample contained enough responses for the suggested statistical analysis, a simple cross tabulation of the new race variables was examined. The variables white respondents (white), American Indian/Alaska Native, and people of color (POC) were included to explore the experiences of these groups with the health behavior variables in the survey: suicide attempts and substance use. For the first variable, suicide attempts, of those individuals who selected American Indian/Alaska Native, 54.2% (n = 195) participants selected that they had attempted suicide. For those individuals who are identified as White Only, 37.8% (n = 1829) had attempted suicide. For the POC variable 47.7% (n= 559) had attempted suicide.

With regards to substance use, of those individuals who selected American Indian/Alaska Native, 34.1% (n = 124) participants selected that they do now or had previously used alcohol or drugs. For those individuals who are identified as white, 23.3% (n = 1129) had used alcohol or drugs. For those participants included in the POC variable, 32.4% (n= 379) had used alcohol or drugs.
Chapter 4: Results

This chapter includes the data analysis and findings regarding the research questions, including the relationships between the input, environment and outcome variables. This chapter is organized by descriptive statistics, bivariate relationships, and binary logistic regression.

The purpose of this study was to examine the influence of negative educational experiences on health behaviors for gender nonconforming Indigenous people. Operationally, the study contrasted the educational experiences of three categories of gender nonconforming people on the health behaviors of substance use and suicidality. The population included the 6,456 respondents who completed the National Transgender Discrimination Survey (NTDS), which created a sample size of 5,547, only including those who identified as gender nonconforming.

The research questions are reviewed below.

1. What is the relationship between identifying as American Indian/Alaska Native within this survey population and the reporting of harassment and discrimination in schools? Harassment and discrimination in schools were operationalized through the responses to self-reported experiences of physical and verbal harassment as it relates to college students. This variable also includes obstacles for students in policies regarding financial aid, housing, and other educational opportunities.

2. Does harassment and discrimination in schools of American Indian/Alaska Native gender nonconforming people impact reported suicide attempts?

3. Does harassment and discrimination in schools of American Indian/Alaska Native gender nonconforming people impact reported substance use?
The data was analyzed to test these three research questions using both descriptive
Substance use is operationalized as a response to the misuse of alcohol or drugs to cope
with mistreatment.

**Descriptive Statistics**

The demographic information of interest includes gender, race/ethnicity, and education.
The demographic information for race for the survey population including a distribution of those
participants selecting a gender nonconforming identity (GNC) is located in Table 4.1. Within
each question the percentage shown represents those individuals who answered that question
with that specific response. There is missing data within each question and therefore the
responses do not equal the total number of overall participants in the analyzed dataset.

**Table 4.1**

<table>
<thead>
<tr>
<th>Race</th>
<th>TransGNC</th>
<th>%</th>
<th>NotTransGNC</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>4558</td>
<td>84.8</td>
<td>814</td>
<td>15.2</td>
</tr>
<tr>
<td>African American or Black</td>
<td>361</td>
<td>92.8</td>
<td>28</td>
<td>7.2</td>
</tr>
<tr>
<td>Amer. Indian/ Alaska Native</td>
<td>329</td>
<td>90.0</td>
<td>39</td>
<td>10.0</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>361</td>
<td>90.0</td>
<td>41</td>
<td>10.0</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>196</td>
<td>92.0</td>
<td>17</td>
<td>8.0</td>
</tr>
<tr>
<td>Arab or Middle Eastern</td>
<td>40</td>
<td>88.8</td>
<td>5</td>
<td>11.1</td>
</tr>
<tr>
<td>Multiracial or mixed race</td>
<td>445</td>
<td>91.6</td>
<td>41</td>
<td>8.4</td>
</tr>
</tbody>
</table>

The three demographic race categories include participants who (1) identify as gender
nonconforming and people of color but who do not identify as American Indian and/or Alaska
Native (labeled as POC) (n=1111), (2) identify as American Indian and/or Alaska Native
identified (labeled as AI/AN) (n=329), and (3) those who did not select either of the previous
two options and identified as white (n=4,107). Additionally, as described in Chapter 3, gender
was recoded into two new variables. The two labels for this recode are TransGNC (n=5547) or Not TransGNC (n=909). The discrepancies in the total race/ethnicity categories and the sample size used in the analysis can be explained by the recoding of the multiracial or mixed race variables. The 445 participants in that category were distributed in the three categories; white, people of color, and American Indian/Alaska Native. The missing cases are responsible for the remaining discrepancies and will be discussed in the data analysis sections relevant to each analysis.

As also discussed in Chapter 3, there was large percentage (87.5%) of the respondents who reported “Some college credit but less than 1 year” or higher on the educational attainment question. Due to the values needed for the analysis and the interest in discussing post K-12 education, only those gender nonconforming respondents who reported at least some college or higher are included (n=5508). The demographic report of highest educational level is outlined in Table 4.2.

Table 4.2

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>AI/AN</th>
<th>%</th>
<th>POC</th>
<th>%</th>
<th>White</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than some college</td>
<td>44</td>
<td>13.4</td>
<td>253</td>
<td>23.4</td>
<td>389</td>
<td>9.4</td>
</tr>
<tr>
<td>Some College but (&lt; 1 Year)</td>
<td>29</td>
<td>8.9</td>
<td>105</td>
<td>9.7</td>
<td>299</td>
<td>7.3</td>
</tr>
<tr>
<td>Technical School Degree</td>
<td>19</td>
<td>5.8</td>
<td>59</td>
<td>5.5</td>
<td>178</td>
<td>4.3</td>
</tr>
<tr>
<td>Some College (&gt;1 year, No degree)</td>
<td>81</td>
<td>24.8</td>
<td>207</td>
<td>19.1</td>
<td>810</td>
<td>19.8</td>
</tr>
<tr>
<td>Associates Degree</td>
<td>35</td>
<td>10.7</td>
<td>79</td>
<td>7.3</td>
<td>325</td>
<td>7.9</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>63</td>
<td>19.3</td>
<td>248</td>
<td>22.9</td>
<td>1178</td>
<td>28.7</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>32</td>
<td>9.8</td>
<td>90</td>
<td>8.3</td>
<td>631</td>
<td>15.4</td>
</tr>
<tr>
<td>Professional Degree</td>
<td>10</td>
<td>3.1</td>
<td>27</td>
<td>2.5</td>
<td>127</td>
<td>3.1</td>
</tr>
<tr>
<td>Doctorate Degree</td>
<td>14</td>
<td>4.3</td>
<td>14</td>
<td>1.3</td>
<td>162</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>327</td>
<td>1082</td>
<td>4099</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following descriptives present the responses to the environment aspects of the I-E-O models utilized in this secondary assessment. The first question asked was “Because you are transgender/gender non-conforming, have you been a target of harassment, discrimination or violence at school?” and for each educational setting of college, graduate or professional school, technical school. The descriptives for the remaining responses as discussed in Chapter 3 are outlined in Table 4.3.

Table 4.3

<table>
<thead>
<tr>
<th>Questions</th>
<th>College</th>
<th>Graduate School</th>
<th>Techn. School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harassed or bullied by students</td>
<td>Yes</td>
<td>11.</td>
<td>4900</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Harassed or bullied by teachers or staff</td>
<td>Yes</td>
<td>5.2</td>
<td>5260</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Physically assaulted or attacked by students</td>
<td>Yes</td>
<td>1.7</td>
<td>5455</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Physically assaulted or attacked by teachers or staff</td>
<td>Yes</td>
<td>0.3</td>
<td>5531</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

The next question asked was “Because I am/was transgender/gender non-conforming, which of the following statements are true?” The options for this answer and responses are included in Table 4.4. The recode of these questions are operationalized as obstacles in the analysis.
Table 4.4
Obstacles in School and Valid Percents

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>N/A</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave school because the harassment was so bad.</td>
<td>368</td>
<td>12.7</td>
<td>2052</td>
<td>71.1</td>
<td>468</td>
<td>16.2</td>
</tr>
<tr>
<td>Leave school for financial reasons related to transition.</td>
<td>325</td>
<td>11.3</td>
<td>1832</td>
<td>63.7</td>
<td>718</td>
<td>25.0</td>
</tr>
<tr>
<td>Lost or could not get financial aid or scholarships.</td>
<td>233</td>
<td>8.1</td>
<td>1865</td>
<td>64.9</td>
<td>774</td>
<td>26.9</td>
</tr>
<tr>
<td>Not allowed to have any housing on campus.</td>
<td>91</td>
<td>3.2</td>
<td>1538</td>
<td>53.7</td>
<td>1235</td>
<td>43.1</td>
</tr>
<tr>
<td>Not allowed gender appropriate housing on campus.</td>
<td>297</td>
<td>10.4</td>
<td>1239</td>
<td>43.2</td>
<td>1331</td>
<td>46.4</td>
</tr>
<tr>
<td>Not allowed to use the appropriate bathrooms etc.</td>
<td>529</td>
<td>18.4</td>
<td>1528</td>
<td>53.2</td>
<td>815</td>
<td>28.4</td>
</tr>
</tbody>
</table>

The last two questions are connected to the outputs in this model. These include substance use and suicide attempts. For suicide attempts, 2,346 respondents or 42.8% of the respondents stated that they had attempted suicide and 3,129 or 57.2% reported that they had not attempted suicide. The responses for substance use are outlined in table 4.5 below.

Table 4.5
Drink or misuse drugs to cope with mistreatment and Valid Percents

<table>
<thead>
<tr>
<th>Possible Responses</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>444</td>
<td>8.1</td>
</tr>
<tr>
<td>Yes, but not currently</td>
<td>1035</td>
<td>18.9</td>
</tr>
<tr>
<td>No</td>
<td>2735</td>
<td>49.9</td>
</tr>
<tr>
<td>Not Applicable/No Mistreatment</td>
<td>1269</td>
<td>23.1</td>
</tr>
</tbody>
</table>

Bivariate Relationships

A visual display of bivariate data shows the relationship between two variables. Bivariate cross tabulations measure the relationship between the expected counts for the two categories (Field, 2009). For the purpose of this study, cross tabulations for the input variables of race were compared between both categories of the dichotomous variables substance use and suicide.
attempts and the collection of questions that create the variables harassment and discrimination (harassment) and negative school experiences (obstacles). Crosstabs are a simple method to visualize the strength of the association between two variables by examining the percentages between each independent/input variable and the outcome variables (Field, 2009). In addition to cross tabs, Pearson chi-square is displayed for each independent variable. For this research, as with most social science research, the significance level of .05 is used. “The p value is the probability (p) that a result could have been produced by chance if the null hypothesis were true” (Creswell, 2012, p.189).

**Relationship between Race and Substance Use.**

Table 4.7 reports the cross tabulation of data for race of the participants and substance use. Figure 4.1 presents that data from Table 4.7 in chart form. The Pearson Chi-Square was statistically significant therefore we can conclude that there is a difference in the three different ethnic categories and substance use. \( \chi^2 (2, N = 5483) = 40.409, p<.001 \). Analysis of adjusted residuals suggests that POC were particularly likely to use substances (adjusted residual = 5.0). AI/AN respondents were also more likely to use substances than would be expected by chance (adjusted residual = 3.3). In contrast, white participants were more likely to *not* use substances (adjusted residual = 6.3).
Table 4.6

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Crosstabulation</th>
<th>Non-Substance Use</th>
<th>Substance Use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI/AN</td>
<td>Count</td>
<td>212</td>
<td>113</td>
<td>325</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>-1.6</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>-3.3</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>POC</td>
<td>Count</td>
<td>714</td>
<td>353</td>
<td>1067</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>-2.3</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>-5.0</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>Count</td>
<td>3078</td>
<td>1013</td>
<td>4091</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>1.7</td>
<td>-2.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>6.3</td>
<td>-6.3</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.1 Bar graph of racial groups and substance use.

**Relationship between Race and Suicide.**

Table 4.8 reports the cross tabulation of data for race of the participants and suicide. Figure 4.2 presents that data from Table 4.8 in chart form. The Pearson Chi-Square test was
statistically significant, therefore we can conclude that there is a difference in the three different ethnic categories and substance use $\chi^2 (2, N = 5475) = 41.476, p = <.001$. Analysis of adjusted residuals suggest that AI/AN were particularly likely to attempt suicide (adjusted residual = 4.6). POC respondents were also more likely to use substances than would be expected by chance (adjusted residual = 3.9). In contrast, white participants were more likely to *not* use substances (adjusted residual = 6.0).

Table 4.7

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Crosstabulation</th>
<th>No Attempt(s)</th>
<th>Attempt(s)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI/AN</td>
<td>Count</td>
<td>144</td>
<td>177</td>
<td>321</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>-2.9</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>-4.6</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>POC</td>
<td>Count</td>
<td>554</td>
<td>515</td>
<td>1069</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>-2.3</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>-3.9</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>Count</td>
<td>2431</td>
<td>1654</td>
<td>4085</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>2.0</td>
<td>-2.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>6.0</td>
<td>-6.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.2 Bar graph of racial groups and reported suicide attempts.
**Relationship between Race and Obstacles.**

Table 4.9 reports the cross tabulation of data for race of the participants and the variable obstacles. Figure 4.3 presents that data from Table 4.9 in chart form. The variable obstacle was created by summing affirmative responses to a yes/no question on issues in education. A positive response would indicate that the individual faced such a barrier. Therefore, a higher response on obstacles would indicate more affirmative responses to the questions regarding various barriers faced in the educational setting. With that in mind, an obstacles level of 0 can be reported as no obstacles for the purpose of this variable. Levels of 1-2 were interpreted as a lower level of obstacles, and 3-5 as a higher level of obstacles. The Pearson Chi-Square was statistically significant, therefore we can conclude that there is a difference in the three different ethnic categories and obstacles \( \chi^2 (2, N = 5547) = 20.754, p = .001 \). Analysis of adjusted residuals suggest that AI/AN were particularly likely to report a high level of obstacles (adjusted residual = 3.5). POC respondents were also more likely to report a high level of obstacles than would be expected by chance (adjusted residual = 1.9). In contrast, white participants were less likely to report a high level of obstacles (adjusted residual = -3.6).
Table 4.8

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Crosstabulation</th>
<th>None</th>
<th>Low</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI/AN</td>
<td>Count</td>
<td>286</td>
<td>30</td>
<td>13</td>
<td>329</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>-0.7</td>
<td>1.0</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>-2.5</td>
<td>1.0</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>POC</td>
<td>Count</td>
<td>993</td>
<td>93</td>
<td>25</td>
<td>1111</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>-0.5</td>
<td>0.9</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>-1.8</td>
<td>1.0</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>Count</td>
<td>3755</td>
<td>301</td>
<td>51</td>
<td>4107</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>-0.5</td>
<td>-0.7</td>
<td>-1.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>2.9</td>
<td>-1.5</td>
<td>-3.6</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.3 Bar graph of race groups and obstacles in education.

**Relationship between Race and Harassment**

Table 4.9 reports the cross tabulation of data for race of the participants and the variable on harassment and discrimination in school. Figure 4.3 presents that data from Table 4.9 in chart form. This variable was created by adding affirmative responses to a series of yes/no questions.
on experiences of harassment and discrimination in education. A positive response would indicate that the individual faced harassment in school. Therefore, a higher response on harassment would indicate more affirmative responses to the questions regarding harassment in the educational setting. With that in mind, a harassment level of 0 can be reported as no harassment for the purpose of this variable. Levels of 1-2 were interpreted as a lower level of harassment and 3-6 as higher level of harassment. The Pearson Chi-Square test was statistically significant, therefore we can conclude that there is a difference in the three different ethnic categories and the variable obstacles $\chi^2 (4, N = 5547) = 17.129, p=.002$. Analysis of adjusted residuals suggests that American Indians/Alaska Natives were particularly more likely to report a high level of harassment (adjusted residual = 2.8). POC respondents were also more likely to report a high level of obstacles than would be expected by chance (adjusted residual = 1.5). In contrast, white participants were less likely to report a high level of obstacles (adjusted residual = -2.9).

Table 4.9

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Crosstabulation</th>
<th>None</th>
<th>Low</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI/AN</td>
<td>Count</td>
<td>257</td>
<td>60</td>
<td>12</td>
<td>329</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>-1.2</td>
<td>1.9</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>-3.0</td>
<td>2.1</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>POC</td>
<td>Count</td>
<td>939</td>
<td>147</td>
<td>25</td>
<td>1111</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>0.2</td>
<td>-0.9</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>0.5</td>
<td>-1.1</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>Count</td>
<td>3463</td>
<td>586</td>
<td>58</td>
<td>4107</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>0.2</td>
<td>0.0</td>
<td>-1.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>1.1</td>
<td>-0.1</td>
<td>-2.9</td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.4 Bar graph of race and harassment in education.

**Relationship between Substance Use and Suicide Attempts.**

The last cross tabulation reported is to explore the relationship between substance use and suicidality. The Pearson Chi-Square was statistically significant therefore we can conclude that there is an association between substance use and suicide. $\chi^2 (1, N = 6346) = 311.678, p<.001$. Analysis of adjusted residuals suggest that those who use substances were particularly likely to attempt suicide (adjusted residual = 17.7).

Table 4.10

<table>
<thead>
<tr>
<th>Substance Use</th>
<th>Crosstabulation</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Count</td>
<td>3108</td>
<td>1618</td>
<td>4726</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>5.7</td>
<td>-6.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>17.7</td>
<td>-17.7</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>Count</td>
<td>661</td>
<td>959</td>
<td>1620</td>
</tr>
<tr>
<td></td>
<td>Std. Residual</td>
<td>-9.7</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted Residual</td>
<td>-17.7</td>
<td>17.7</td>
<td></td>
</tr>
</tbody>
</table>
Logistic Regression Analysis

Since all of the variables from the bivariate analysis were statistically significant, they were included in the logistic regression. The five variables entered in the regression analysis were the three categories race variables, substance use, suicide attempts, obstacles, and harassment. The variables of substance use and suicide attempts are dichotomous and the variables race, obstacles, and harassment are categorical.

Because the variables obstacles and harassment were tested as an interaction, the individual variables were centered and multiplied before they were entered into the logistic regression model. Centering variables that interact is recommended practice in regression analysis to reduce multicollinearity between predictors (Aiken & West, 1991). The previous value of zero for no harassment and no obstacles were recoded to -1, 1 for lower levels recoded to zero and the higher levels for both variables was recoded to 1. For obstacles, the reference category is no obstacles and for harassment the reference is no harassment. In logistic regression, the model with the predictor variables, in this case the environmental aspects of the I-E-O model, is compared with the base model (Field, 2009).

Logistic Regression-Suicide. A logistic regression analysis was conducted to predict suicide attempts for gender nonconforming participants, using race, harassment and obstacles faced in school as predictors. A test of the full model against a constant only model was statistically significant, indicating that the predictors as a set reliably distinguish between those who attempt suicide and those who do not $\chi^2 (11, N = 5475) = 151.488, p < .000$, Nagelkerke’s $R^2 = .030$.

Nagelkerke’s $R^2$ of .030 indicated a slight relationship between prediction and grouping. Prediction success overall was 60.1% (90.7% for no attempt and 19.1% for at least one attempt).
The Wald criterion demonstrated that both obstacles (p=.012), harassment by race, specifically American Indian/Alaska Native (p=.007) and white (.020), and harassment by obstacles by race (p=.015) made a significant contribution to prediction. The main effect of race is not significant. Below this, are the two dummy codes comparing American Indians/Alaska Native (AI/AN) to whites (1) and AI/AN to POC (2). Both are non-significant, indicating no racial differences in suicidality. Additionally, the effect of harassment is non-significant. Suicide attempts do not differ as a function of harassment. Lastly, the effect of obstacles on suicide did not vary by race.

Obstacles were significant. Increases in obstacles are associated with an increased likelihood of suicide attempt. Harassment and obstacles did not interact in this model. However, harassment did interact with race. It therefore appears that the effect of harassment on suicide differed between AI/AN and white participants. The effect of harassment on suicide did not differ between AI/AN and POC.

There is a three-way interaction between race, harassment, and obstacles. However, neither the difference between AI/AN and whites nor the difference between AI/AN and POC was responsible for this as neither of the contrasts was significant. It may be that the difference driving the effect is between whites and POC.

In an effort to explore the interaction between the significant variables in the model the regression was run selecting each racial group/ethnicity separately. For the first analysis only American Indian/Alaska Native participants were selected. A test of the full model against a constant only model was statistically significant, indicating that the predictors, as a set, reliably distinguish between those who attempt suicide and those who do not $\chi^2 (3, N = 329) = 10.302, p < .016$, Nagelkerke’s $R^2 = .042$. As in the original regression, an increase in obstacles was
associated with an increased likelihood of suicide attempt ($p = 0.12$). Harassment was not significant for AI/AN respondents and harassment and obstacles did not interact in this model.

In this analysis the effects of the significant variable, obstacles, is important but must be examined cautiously due to the significant higher order interactions. The lower order effects were examined to further analyze the interactions and to identify the patterns among the variables. American Indian/Alaska Native suicidality rates were the highest of all three groups at 53.7%. The American Indian/Alaska Native people who were high in obstacles and low in harassment had the highest likelihood of suicide attempts in the AI/AN group. This was closely followed by AI/AN participants who were both high in harassment and obstacles. Participants who were high in harassment and low in obstacles had the lowest likelihood of suicide attempts. These relationships are graphed in figure 4.5 and reflect the probability of substance use for AI/AN people in this sample related to obstacles and harassment.

![Probability of Suicide Attempt for AI/AN](image)

Figure 4.5 Bar graph of probability of suicide for American Indian/Alaska Native.

For the second analysis only white participants were selected. A test of the full model against a constant only model was statistically significant, indicating that the predictors, as a set,
reliably distinguish between those who attempt suicide and those who do not $\chi^2 (3, N=4107) = 73.389, p < .001$, Nagelkerke’s $R^2 = .024$.

As in the original regression, an increase in obstacles was associated with an increased likelihood of suicide attempt ($p<.001$). Harassment was also significant for white respondents ($p<.001$), indicating that increased harassment is associated with an increased likelihood of suicide for white respondents. Harassment and obstacles did not interact in this model.

White participants had the lowest rate of suicidality at 40.4%. The white participants who were high in obstacles and high in harassment had the highest likelihood of suicide attempts in the white group. Participants who were low in harassment and low in obstacles had the lowest likelihood of suicide attempts. These relationships are graphed in figure 4.6 and reflect the probability of substance use for white people in this sample related to obstacles and harassment.

![Figure 4.6 Bar graph of probability of suicide attempts for white participants.](image)

For the third analysis only people of color (POC) participants were included. A test of the full model against a constant only model was statistically significant, indicating that the predictors, as a set, reliably distinguish between those who attempt suicide and those who do
not $\chi^2 (3, N=1111) = 26.644, p < .001$, Nagelkerke’s $R^2 = .033$. Neither obstacles nor harassment alone were significant. However, harassment and obstacles interacted in this model ($p=.01$).

Suicide attempt rates for POC are quite high at 46.3%. The people of color who were high in obstacles and low in harassment had the highest likelihood of suicide attempts for people of color. Participants who were low in harassment and low in obstacles had the lowest likelihood of suicide attempts. These relationships are graphed in figure 4.7 and reflect the probability of substance use for people of color in this sample related to obstacles and harassment.

![Figure 4.7 Bar graph of probability of suicide attempts for people of color.](image)

Figure 4.7 Bar graph of probability of suicide attempts for people of color.
Logistic Regression—Substance Use. A logistic regression analysis was conducted to predict substance use for gender nonconforming American Indian/Alaska Native (AI/AN) participants using harassment and obstacles faced in school as predictors. A test of the full model against a constant only model was statistically significant, indicating that the predictors, as a set, reliably distinguish between those who use substances to cope and those who do not $\chi^2 (11, N = 5483) = 115.4358, p < .000$, Nagelkerke’s R2 = .030.

Nagelkerke’s R2 of .030 indicated a slight relationship between prediction and grouping. Prediction success overall was 72.9% (99.4% for no use and 1.3% for use). The Wald criterion demonstrated that the interaction of harassment by obstacles (p=.007, harassment by race,
specifically AI/AN (p=.044), obstacles by race, specifically white (p=.036), and harassment by obstacles by race (p=.020) made a significant contribution to prediction.

As also reported in suicidality, the main effect of race is not a significant predictor of substance use. Below this are the two dummy codes comparing AI/AN to whites (1) and AI/AN to POC (2). Both are non-significant, indicating no racial differences in substance use. The effect of harassment is non-significant. Substance use does not differ as a function of harassment. The variable obstacles is also non-significant. Substance use does not differ as a function of obstacles. Harassment and obstacles did interact. (p=.007). Harassment does vary as a function of obstacles.

Harassment did not interact with race overall (p=.105). However, harassment comparing AI/AN to whites was significant. (p=.044). The results suggest that the effect of harassment on substance use differed between AI/AN and white participants. The effect of harassment on substance use was not significant between AI/AN and POC. The effect of obstacles on substance use did not vary by race overall. However, exploring obstacles in regards to AI/AN versus whites was significant (p=.036). It looks like the effect of harassment on substance use differed between AI/AN and white participants. The effect of obstacles on substance use was not significant between AI/AN and POC. There may be a three-way interaction between race, harassment, and obstacles as a marginal interaction is found (p=.059). The difference between AI/AN and whites (p=.02) was significant however the difference between AI/AN and POC was not.

In an effort to explore the interaction between the significant variables in the model, the regression was run selecting each racial/ethnic variable by case. For the first analysis only American Indian/Alaska Native cases were selected. A test of the full model against a constant
only model was statistically significant, indicating that the predictors, as a set, reliably distinguish between those who use substances and those who do not $\chi^2 (3, N = 329) = 11.362, p = .010$, Nagelkerke’s $R^2 = .047$. Neither obstacles nor harassment alone were significant. However, harassment and obstacles did interact in this model ($p = .007$).

The lower order effects were examined to further analyze the interactions and to identify the patterns among the variables. 34.3% of American Indian/Alaska Native respondents reported using substances. The American Indian/Alaska Native people who were both high in harassment and high in obstacles had the lowest likelihood of substance use of the AI/AN group. Participants who were low in harassment and high in obstacles had the greatest likelihood of substance use. These relationships are graphed in figure 4.8 and reflect the probability of substance use for AI/AN people in this sample related to obstacles and harassment.

![Figure 4.8 Bar graph of probability of substance use for American Indian/Alaska Native.](image)

For the second analysis, only white cases were selected. A test of the full model against a constant only model was statistically significant, indicating that the predictors as a set reliably
distinguish between those who attempt suicide and those who do not $\chi^2 (3, N = 4107) = 50.826, p < .001$, Nagelkerke’s $R^2 = .018$.

Obstacles were significant ($p = .014$). Increases in obstacles are associated with an increased likelihood of substance use for white respondents. Harassment was also significant for white respondents ($p = .022$); therefore an increase in harassment is associated with an increased likelihood of substance use for white respondents. Harassment and obstacles did not interact in this model. While the higher order three way interaction between race, obstacles, and harassment is marginal ($p = .059$) it may provide some valuable discussion points for this analysis, as long as the marginal nature of the significance is kept in context.

The lower order effects were examined to further analyze the interactions and to identify the patterns among the variables. 24.7% of white respondents reported using substances. The white people who were both high in harassment and high in obstacles had the highest likelihood of substance use of the white group. Participants who were low in harassment and low in obstacles had the lowest likelihood of substance use. These relationships are graphed in figure 4.9 and reflect the probability of substance use for white people in this sample related to obstacles and harassment.
For the third analysis, only cases for those respondents in the people of color (POC) category were selected. A test of the full model against a constant only model was statistically significant, indicating that the predictors, as a set, reliably distinguish between those who attempt suicide and those who do not $\chi^2 (3, N=1111) = 13.939, p = .003$, Nagelkerke’s $R^2 = .018$. Neither obstacles nor harassment alone were significant. Harassment and obstacles did not interact in this model.

The lower order effects were examined to further analyze the interactions and to identify the patterns among the variables. 31.7% of people of color reported using substances. The probability for people of color to use substances was extremely close for those who reported both low and high harassment. Additionally, those people of color who reported high obstacles had similarly high levels of substance use. Those people of color who reported low obstacles and low harassment were only slightly less likely to use substances. These relationships are graphed in figure 4.10.and reflect the probability of substance use for people of color in this sample related to obstacles and harassment.
Figure 4.10 Bar graph of probability of substance use for people of color participants.

Table 4.12

<table>
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<td>.750</td>
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<td>.346</td>
<td>.999</td>
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<td>.318</td>
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<td>.570</td>
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<td>.619</td>
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**Relationship of Substance Use and Suicidality**

To further explore the influence substance use may have on suicide, the variable for substance use was entered into the logistic regression model to explore what changes if any took place. No effects became significant that were not and no effects that were significant became non-significant. So while the analysis using the bivariate correlation suggests that there is a relationship between those who use substances and suicidality and substance use remained a strong predictor in the full model, the relationship does not impact the model in such a way that substance use could completely explain the relationships between race/ethnicity, obstacles, and harassment.
Chapter 5: Discussion

Introduction

The purpose of this study is to provide more insight into transgender and gender nonconforming Indigenous people’s experiences in education and the impact on health behaviors. Specifically, this is meant to understand how harassment, discrimination, and obstacles in education impact substance use and attempts of suicide for gender nonconforming Indigenous people.

The first research question provides some foundational information for the study about the experiences of Indigenous gender nonconforming people and harassment and discrimination in schools, while the next two questions were asked to further explore the ways in which school harassment, discrimination and obstacles specifically impacted health behaviors of this group.

From the review of the literature, Indigenous people are more likely to attempt suicide (Bureau of Indian Affairs, 2001; Langhinrichsen-Rohling, Friend & Powell, 2009; Lanier, 2009; Muehlenkamp, Marrone, Gray, & Brown, 2009; Rutman, Park, Castor, Taualii, & Forquera, 2008) and use substances (Beauvais, Jumper-Thurman, & Burnside 2008; Cohen, Feinn, Arias, & Kranzler (as cited in Ward & Ridolfo, 2011); Dawson, May & Gossage, Grant et. al.; Olson & Wahab, 2006; Ramisett-Mikler & Ebama, 2011; and Wallace et. al. 2003).

While limited research is available on transgender people, a few reports state that gender nonconforming/transgender people have higher rates of substance use than individuals who are not transgender or gender nonconforming (McKirnan & Peterson, 1989; Skinner & Otis, 1996; Clements, Marx, Guzman, Ikeda, & Katz, 1998; Jaffe, Clance, Nichols & Emshoff, 2000; CSAT, 2001; Weber, 2008; National Gay and Lesbian Taskforce (NGLTF), 2012; National Center for Transgender Equality, 2012) and suicide attempt rates (Liu & Mustanski, 2012; McGuire, 2012).

The literature also reports that both American Indian/Alaska Native individuals (Belgarde, 1992; Huffman, 1991; Larimore & McClellan, 2005; Perry, 2002) and gender nonconforming individuals—specifically transgender identified people (Beemyn & Rankin, 2011; GLSEN Report on School Climate, 2009; Kim, Sheridan, & Holcomb, 2009; National Gay and Lesbian Taskforce, 2010; National Gay and Lesbian Taskforce and the National Center for Transgender Equality, 2011)—report experiencing higher rates of incidents that would be included in the definition of harassment and obstacles for the purpose of this analysis.

The unique focus of this analysis is to explore if there is a relationship between harassment and discrimination on suicidality and substance use for Indigenous gender nonconforming students who participated in this survey. To review, the three research questions were 1) what is the relationship between identifying as American Indian/Alaska Native within this survey population and the reporting of harassment and discrimination in schools? 2) Does harassment and discrimination in schools of American Indian/Alaska Native gender nonconforming people impact reported suicide attempts? 3) Does harassment and discrimination in schools of American Indian/Alaska Native gender nonconforming people impact reported substance use?

The data was analyzed to test these three research questions using both descriptive

Summary of Findings

The secondary analysis of the data included descriptive statistics, bivariate relationships, and binary logistic regression. The descriptive statistics provided more detailed information on the sample population used in this analysis. The bivariate relationships measured the expected
and observed counts in the dependent or outcome variables. All of the variables were statistically significant in the bivariate analysis and therefore were included in the binary logistic regression.

To conceptually frame the discussion of the findings, Astin’s Input-Environment-Outcome (I-E-O) model (Astin, 1993) was used. The categories of racial identity and gender identity are identified as the input variables. Harassment and obstacles in education are identified as the environment variable and suicide and substance use as the output variables in this model as displayed in Figure 3.1 and 3.2.

**Research Question One:** Within this sample of gender nonconforming people, what is the relationship between identifying as American Indian/Alaska Native and the reporting of harassment, discrimination and obstacles in schools? The analysis of adjusted residuals suggests that AI/AN were particularly likely to report a high level of obstacles (adjusted residual = 3.5). While POC respondents were also more likely to report a high level of obstacles than would be expected by chance (adjusted residual = 1.9) their levels were however still less than AI/AN. In contrast, white participants were less likely to report a high level of obstacles (adjusted residual = -3.6).

As it relates to the second element of negative educational experiences, the analysis of adjusted residuals suggests that American Indians/Alaska Natives were particularly more likely to report a high level of harassment (adjusted residual = 2.8). POC respondents were also more likely to report a high level of harassment than would be expected by chance (adjusted residual = 1.5), however this was again less than AI/AN. In contrast, white participants were less likely to report a high level of harassment (adjusted residual = -2.9).
Therefore, it seems that in this sample American Indians /Alaska Natives were more likely than other racial identity groups to report higher levels of harassment, discrimination, and obstacles in schools. This would seem to support the hypothesis that there is a statistically significant correlation between American Indian/Alaska Native identity and experiences of harassment, discrimination and obstacles in school.

**Research Question Two:** Does harassment and discrimination in schools of American Indian/Alaska Native gender nonconforming people impact reported suicide attempts? American Indian/Alaska Native people have statistically significant higher rate of substance use in this sample at 34.3%, but this is only slightly above the 31.7% for the people of color group. Harassment, discrimination and obstacles do impact American Indian/Alaska Native people as it relates to substance use. However the impact of harassment and discrimination depends on the level of obstacles. Specifically, a combination of high obstacles and low harassment is associated with the highest likelihood of substance use for this group while the combination of high obstacles and lower harassment leads to the highest probability of substance use. The idea that low obstacles and low harassment would lead to the lowest rate of substance use may seem contradictory to the review of literature regarding the rates of substance use and the impact of harassment and discrimination for AI/AN people.

There could be several protective factors that have a mitigating influence on substance use including college access, family expectations, and gender identity. These concepts will be discussed in the policy and practice section. However, it was also clear that due to the higher order interactions, even though marginal, the relationship between race, obstacles, harassment, and substance use is complex.
**Research Question Three:** Does harassment and discrimination in schools of American Indian/Alaska Native gender nonconforming people impact reported substance use? Over 53% of the American Indian/Alaska Native respondents in this survey reported that they had attempted suicide. In the separate analysis by race, for AI/AN respondents obstacles predicts suicide. As an AI/AN student experiences obstacles in schools they have an increased likelihood of suicide attempts. Harassment is not significant with suicide on its own for AI/AN participants, so for this sample suicidality does not seem to be impacted by harassment alone for AI/AN respondents. However, it was also clear that due to the higher order interactions, the relationship between race, obstacles, harassment and suicidality is complex.

**Influences of the Conceptual Framework**

The conceptual framework used in this secondary analysis is grounded in Astin’s Input-Environments-Output Model. The model’s three components– input, environment, and output–overlays with the variables examined. Astin (1993) refers to the qualities, skills, and identities that a person brings into the assessment environment just as the participants bring their racial backgrounds and gender identities. Environment refers to the actual experience of the individual, like their exposure to harassment, discrimination, and obstacles in school. Outputs then are the impact of the program, initiatives, and exposure on individuals. This analysis attempts to demonstrate the impact the environmental variables have on health behaviors, keeping the inputs, or race/ethnicity and gender identity, in perspective.

The I-E-O model offers a framework for the current project that examines negative health behaviors that may influence the retention and success of students. By applying the understanding of interdependence between the I-E-O elements, the complex nature of interactions with identity and experiences on the factors of suicide and substance use may be
more fully understood. More specifically, this model acknowledges the fundamental aspects of environments/experiences on student social and academic success.

It is critical to acknowledge that obstacles, harassment and discrimination in schools have an impact on the experiences of American Indian/Alaska Native gender nonconforming students. In the analysis of both substance use and suicide, these students faced more concerning reports of these negative health behaviors. Understanding the relationships between these environmental factors as it impacts AI/AN students can be a key element in mitigating the rates of suicide and substance use.

**Implications from Practice to Policy**

Much of the existing literature, specifically work that centers on the college student experience, focuses on singular isolated identities. Those authors that do discuss multiple identities for students usually do so in a chapter by chapter format of identity development, racial/ethnicities in one chapter, sexual orientation—and if mentioned, gender identity—in another. More contemporary literature may mention intersectionality, where the complexities of students are acknowledged, but there is little analysis where the real implications of that intersectionality are presented. This study attempts to ground the experiences of gender nonconforming Indigenous people as an interwoven experience that is full of unique complexities and possibilities.

In both substance use and suicide, obstacles were significant for American Indian/Alaska Native people. Obstacles in this analysis are connected to many of the policies and practices that relate to gender identity on college campuses. Several of the questions refer to gender inclusive spaces; housing, restrooms, locker rooms as well as financial resources. This study would suggest that on campuses where policies and practices do not provide for gender inclusive
spaces, American Indian/Alaska Native students may struggle with these systematic forms of inequality in a significant way.

The institution, if it wants to truly address these complex issues, must not only address the bias and harassment students face from individuals, but it may be a of greater importance for institutions to make substantial efforts to include gender identity into definitions of diversity and multicultural initiatives. Students who attend colleges that have inclusive policies may benefit in a direct way that can be supported, as least in part, by this analysis. This conclusion puts a much greater burden on the administration of colleges and universities to take responsibility for campus climate and to acknowledge that polices do have a direct impact on the success of some of our most at-risk students.

**Suicide.** In previous analysis of AI/AN college students, 34% of the respondents had thought about or attempted suicide in the past year (Scheel, 2011). In this analysis of gender nonconforming American Indian/Alaska Native people, suicidality rates were the highest of all three racial groups at 53.7%, almost double that offered in this previous research (Scheell, 2011). Campus communities are aware of the alarming rates of suicide for college students. Particular attention must be given to gender nonconforming students and our Indigenous students however, doing so in isolation of their intersectional identities might be ignoring one of the highest risk groups.

The current research on suicide discussed the impact of harassment and obstacles in education for gender nonconforming Indigenous people. From this analysis, American Indian/Alaska Native students in this sample were more likely than any other racial group to experience harassment and obstacles in their educational experience. While harassment on its own did not have a relationship to suicidality, obstacles clearly did. AI/AN students who face
increased levels of obstacles in education face an increased risk of suicide. This connection between barriers in education for Indigenous students is important as a campus community examines possible interventions for suicide reduction.

Understanding culturally responsive methods of suicide prevention within Indigenous communities means recognizing that suicide in Indigenous communities is frequently identified as the terminal outcome of historical oppression, current injustice, and ongoing social suffering (Wexler & Gone, 2012). Also relevant to this specific population is the higher rates of mental health issues for students who face obstacles, as LGBT young adults who reported educational barriers are 2.6 times more likely to report depression and 5.6 times more likely to report having attempted suicide at least once, and having a suicide attempt that required medical attention (Russell, Toomey, Diaz & Sanchez, 2011).

However there are limited resources within the mental health community, even beyond college campuses to ensure a culturally competent approach that addresses the needs of gender nonconforming Indigenous people. In the 2007 publication, “Serving Native American Students” (CHiXapkaid & Inglebret, 2007), there was no mention of the impact of intersectionality on the experiences of these students. The 2007 “American Indian Alaska Native Student’s Guide to College Success” (Fox, Lowe, & McClellan, 2007) does little to offer support for these students, who may find college difficult not merely due to their racial and ethnic background. This is not to say that materials published about LGBT college students have created much more in the way of suggestions or research. Materials published by major LGBTQ organizations also suffer from a lack of intersectional information. If they do discuss race and/or ethnicity, it is usually by referencing services or resources that would serve all students of color as one homogenous group.
While literature that explores these identities together is rare, there are some common themes that might be relevant interculturally. Both Indigenous students of all gender identities and gender nonconforming students of all races face high levels of suicidality. From a dominate paradigm, “suicide expresses underlying psychological problems versus suicide expresses historical, cultural, community, and family disruptions” (Wexler & Gone, 2012, p.800). Acknowledging the impact of historical and current trauma on suicidality for gender nonconforming Indigenous students may encourage more aggressive responses to policies that negatively impact this community. Barriers like those that made up the obstacles variable in this study--lack of gender inclusive housing, gender inclusive bathrooms and locker rooms-- may not only be unwelcoming to our gender nonconforming students, but for some they may influence the suicide rates of our students.

Both Indigenous people and gender nonconforming people have complex experiences with the mental health profession. Only in the past decade have organizations like the American Medical Association, American Counseling Association, and the American Psychological Association discounted efforts like conversion therapy to “treat” homosexual and gender related disorders. The AMA Policies for GLBT Issues now state that the AMA “opposes, the use of ‘reparative’ or ‘conversion’ therapy that is based upon the assumption that homosexuality per se is a mental disorder or based upon the a priori assumption that the patient should change his/her homosexual orientation” (American Medical Association, 2013). However, this type of therapy treatment, which may have included aversion therapy and electroshock therapy treatments, was used to “treat” those outside of the sexual orientation and perceived gender expectations for decades.
The Diagnostic and Statistical Manual of Mental Disorders (DSM IV) lists gender identity disorder as a mental illness under sexual disorders and dysfunctions (American Psychiatric Association, 2013). While there is some hope that in the revision of the DSM due out in May of 2013 will no longer identify gender nonconforming or transgender people as mentally ill, it is still listed as a disorder with the AMA and other organizations, ironically in statements meant to affirm trans inclusive policies. For example, Policy H-185.950 of the AMA regarding removing financial barriers to care for transgender patients states “Our AMA supports public and private health insurance coverage for treatment of gender identity disorder as recommended by the patient’s physician” (American Medical Association, 2013, p1).

For Indigenous people, mental health professionals that focus on Western style approaches may erroneously engage in ineffective and possibly damaging care. “Attitudinal beliefs about physical and mental illness are largely culturally determined, with illness viewed through Western biopsychosocial beliefs, or through religious, spiritual, interpersonal, and/or supernatural beliefs. Considering whether these assumptions are aligned with indigenous communities’ conceptualizations is crucial for developing effective services” (Wexler & Gone, 2012, p.801).

Mental health professional may underestimate the impact of historical trauma and the need for cultural reference for people accessing their services.

Intervention (by clinically trained mental health professionals) is built on the belief that suicide is a clinical outcome in the face of mental illness, rather than an outcome of an unjust historical legacy that leads to a host of undesirable social outcomes, including suicide. The latter belief is often espoused by indigenous researchers and tribal members and underscores the importance of considering the neocolonial implications of current practices, in which conventional professional approaches to presumed indigenous mental health programs harbor the potential for implicit Western cultural proselytization.(Wexler & Gone, 2012, p.803).
For policies and practices to be effective in reducing the suicide risk for gender nonconforming Indigenous people, they must acknowledge the history of trauma from establishment enterprises that are created and organized around dominant paradigms for normalcy, whether it is the colonialist interpretations of community, mental health and recovery, or the infliction of a gender binary on those who supersede the restrictions of that dichotomy.

Researchers have examined environmental and contextual protective and risk factors related to Indian youth suicide such as prejudice experienced in schools, the impact of colonialization, poverty, and conflicts with the police. Protective conditions indentified have included the following: (a) a friend or adult with whom to discuss concerns, (b) strong cultural beliefs, (c) supportive adults, (d) friends who do well in school, and (e) neighbors who care. Risk conditions noted were the following: (a) a sense of alienation in school, (b) poverty, (c) friends involved with drugs and alcohol, (d) coercive parents and caretaker rejection, (e) perceived discrimination (Strickland & Cooper, 2011, p.241).

Similar risk conditions and factors are outlined as proactive suggestions regarding LGBT youth and issues of depression and self-harming behaviors. Studies suggest that policies that affirm the identities of these individuals, address violence and discrimination assertively, and eliminate practices that reinforce heteronormative and gender normative behaviors may positively impact these communities (Beemyn & Rankin, 2011; D'Augelli, Grossman & Starks, 2006; Grossman, D'Augelli, Howell, & Hubbard, 2006; Toomey et. al., 2010). The results of this study suggest that the most effective strategies for Indigenous gender nonconforming students must incorporate a holistic context and integrated services if the campus community hopes to reduce their risk for suicide.

“An effective prevention program possess three core components; integrating cultural tradition, connecting students with healthy mentors and role models, and erasing stigma associated with seeking treatment” (Freeman, 2010, p.24). While these concepts are presented in relation to serving Indigenous students, the same concepts can be a successful framework for
serving gender nonconforming students. However the concept of culture must be broadened to include the unique aspects of experience for these students that may not mirror Indigenous students who are not gender nonconforming.

Fostering students' sense of connection to their culture and community ultimately furthers their sense of belonging in the world at large. As a result, two vital characteristics for building healthy self esteem— a sense of purpose and connection— are strengthened, and the risk of suicide subsequently lowered (Freeman, 2010, p.26)

**Substance Use.** While in this sample Indigenous participants did not seem to face an increase risk of substance use if they faced harassment, there was an interesting relationship between obstacles and substance use. When American Indian/Alaska Native participants face high levels of obstacles and high levels of harassment they reported the lowest substance use. This is counter to much of the literature reports on Indigenous people and substance use.

Research has found that Native American adolescents' substance use is associated with perceptions of schools as unjust. Native American adolescents who experience social isolation and rejection from a dominant culture that differs from their own may struggle to find environments in which they feel they belong. Discrimination and isolation can limit the protective effects of mainstream social institutions and conventional activities. (Chen, Balan & Price, 2012, p.1429).

So what may be different about this population that would impact substance use in such a way that negative educational experiences would not have a similar influence? By reducing the sample only to those with some college background, the experiences around alcohol specifically may be impacted by the expectations of family and community to be successful in college.

American Indian college students might represent one of the most determined and hopeful groups of American Indians; a group that has often overcome obstacles to make it to college, and one that is often committed to using the education they obtain to help their people (Scheel, 2011, p.285).

Indigenous students, regardless of gender identity, may feel greater social and community pressure to minimize behaviors that would negatively impact their academic success.
Chen, Balan, & Price (2012) highlighted in their research some contextual predictors that mitigate substance use. Those include “parent-child bonding, parental monitoring, school attachment, community engagement, delinquent peer affiliations, and individual attitudes towards substance use are key contextual predictors most often reported in the literature” (p.1426).

While issues of parent-child bonding and parental monitoring may not seem most directly relevant in a college situation, the other factors could influence substance use. While the excessive use of alcohol on college campuses is often highlighted in the mainstream media, and concerns around binge drinking and alcohol related violence, research on general alcohol use for most college students has stayed somewhat consistent and with rates still lower than American Indian/Alaska Native alcohol use (National Institutes of Health, 2007). Additionally, the community of individuals students would be exposed to on a college campus may represent a population considered less delinquent, as defined by contact with law enforcement and exposure to excessive long term alcohol use, than individuals who are not on a college campus.

One additional factor that is exceptionally relevant for this study is the influence that intersectional identities have on the experience of these students. For a gender nonconforming Indigenous student, their experiences with cultural identity may be a space where certain protective factors exist. The tension between traditional Indigenous culture and Euro-American culture may exist for these students however finding a sense of place among historical Indigenous people and experiences of gender may help strengthen a connection to that cultural identity. This experience of LGBTQ Indigenous people and deepening that connection around gender identity and expression could provide a link to cultural expression and community.

‘As gay Indians, we feel that connection with our ancestors.’ Erna Pahe (Navajo), cochair of Gay American Indians, add that this connection gives advantages; ‘In our culture [and] in our gay world, anybody can do anything. We can sympathize; we can really feel how the other sex feels. [We are] the one group of
people that can really understand both cultures. We are special’ (Williams, 1992, p.251).

In situations where Indigenous youth can find a sense of place within a cultural identity, they may value sobriety and/or grounding oneself in other experiences that are not self-harming or destructive. “Cut off from a sense of tradition, young homosexual Indians are left, like gay non-Indians, with only their sexuality as a means of defining themselves” (Williams, 1992, p.210). Developing a more complex holistic identity around gender and race, around self and community, may disrupt some cycles of trauma and oppression that are found to impact these communities so significantly. “Decolonizing efforts in the form of community activism and cultural engagement have been associated with significantly reduced suicide rates and increased well-being in native North Americans” (Wexler & Gone, 2012, p.804).

Relationship between Substance Use and Suicide. There is clearly significance in the relationship between substance use and suicide, both in this study and in other research on both Indigenous and gender nonconforming people. Anecdotally, many of the same suggestions regarding suicide and culturally appropriate interventions would seem relevant for addressing substance use if both are correlated to culture loss, poverty, and systemic oppression. Most of the research suggests that substance use is a method of self-destructive behavior, or utilized as a coping strategy around other stresses that also impact suicidality.

Three dominant Western hypotheses about the co-occurrence of suicidal behavior and substance abuse include the following: (1) both behaviors are motivated by a single cause such as unbearable stresses, a sense of inadequacy or unmet expectations, or an attempt to "escape" life's difficulties; (2) both behaviors are an expression of a third factor, such as other psychiatric conditions (i.e., depression or disruptive behavior disorders), poor impulse control, or negative life experiences (abuse or trauma); and (3) chronic or episodic substance abuse has biological, legal, emotional, and physical consequences that increase risk for suicide in vulnerable populations (Barlow et.al., 2012, p.404).
This relationship is not only documented in Indigenous communities, but in all communities across generations and ethnic backgrounds. “Alcohol and substance misuse is associated with an increased risk of suicide at all ages. Cross-national data also supports the idea that the greater the alcohol consumption, the greater the suicide rate”. (Payne, Swami, & Stanistreet, 2008, p.28). However, the relationship between substance use and suicidality in Indigenous communities seems overwhelming. “26.3% of deaths among American Indian and Alaska Native populations were alcohol induced compared with 7.5% among whites” (Xu et. al., 2010 as cited in Chen, Balan, & Price, 2012, p.1427). Howard-Pitney et. al. (1992), Blum et. al. (1992), and Gotowiec & Beiser (1993) also found alcohol and drug use to be related to AI/AN suicide risk. May & Van Winkle (1994) found that 97% of suicides among Indian youth were linked to abuse, neglect, and alcohol (as cited in Strickland & Cooper, 2011).

Clearly, addressing substance use and suicidality in Indigenous gender nonconforming college student communities is critical. This research suggested that not all negative health behaviors have the same relationships to health behaviors in the educational setting; therefore certain different proactive approaches might have more profound influences in mitigating these concerning health behaviors. Additionally, Indigenous gender nonconforming students cannot be viewed with isolated identities that exist but are irrelevant to our responses. Within the student services profession, suicidality rates of one in every two should spark immediate approaches to serve this community with more intentionality, resources, and direct service.

**Recommendations for Future Research**

The suggestions for future research comprise a desire for more depth and more breadth of research in the experience of Indigenous gender nonconforming people. This secondary analysis
was limited in scope by the variables of education experiences in schools and the influence of substance use and suicide.

Specifically related to these variables, additional analyses could be done to explore the relationships that may exist with the people of color racial category. These groups have unique lived experiences and face different stereotypes and types of discrimination. Exploring the differences that exist in the POC category would add a much richer analysis of the influence of racial background on mental health and experiences in education.

An additional analysis related to these variables is related to American Indian/Native Alaska people who have various tribal affiliations. The original data collected solicited tribal affiliation options. Some of the current literature looks at the unique experience various tribes have with alcohol, substance abuse, and the influence of mental health treatments. It would be informative to contrast this data with tribal-specific reports and research.

A compelling argument exists to look at additional variables that could have a significant impact on these same outcome variables. Other environmental factors such as income, living arrangements, relationship and employment status could all have impacts on these health behaviors. For example, where a respondent lives could impact exposure to substances and access to mental health services. Additionally, other input factors like age, ability, other health concerns, and citizenship/immigration status can have a significant impact on the experiences of these survey participants with substance use and suicide. The lives and experiences of all people are complex, and many factors outside the scope of this analysis should be explored for a more holistic perspective.

Lastly, a component of additional research that is recommended is increasing the depth of information available. Research that would provide more opportunities for rich descriptions of
the experiences of Indigenous people related to substance use and suicide is important to provide a more accurate understanding. The research presented here can provide some outlines of the experience of this survey group; however, focus groups, interviews, and similar methodologies would ensure a more detailed understanding of the complex myriad of factors that influence both experiences in schools and the health behaviors discussed here. Another benefit of exploring these topics using these methods is continued contributions to the literature that comes from the lived experiences of Indigenous people honoring Indigenous voices, and promoting authentic culturally relevant discourse.
References


Appendix A: Additional Definition of Terms

First Nations: usually referring to the Indigenous individuals of Canada but sometimes used by other Indigenous people outside of that nation.

Gender Assignment: a special case of gender attribution which occurs only at birth. (McKenna & Kessler, 1974).

Gender attribution: whereby we look at somebody and say, "that's a man," or "that's a woman." And this is important because the way we perceive another's gender affects the way we relate to that person. (Bornstein, 1994).

Gender Conforming/Gender Nonconforming: Assuming the normative social expectations of gender including what it means to be male/man and female/woman and agreeing to participate in the rules and social contracts for those genders (gender conforming) or to not participate in the rules and social contracts (gender nonconforming).

Gender Role: a set of prescriptions and proscriptions for behavior-expectations about what behaviors are appropriate for a person holding a particular position within a particular social context. A gender role, then, is a set of expectations about what behaviors are appropriate for people of one gender. (McKenna & Kessler, 1974)

Sex: (or biological gender) is typically defined as one’s biophysiological makeup. Although often reduced to genitalia, sex is established through the complex interplay between genetic, hormonal, gonadal, biochemical, and anatomical determinants that affect the physiology of the body and sexual differentiation of the brain. (Beemyn & Rankin., 2011).

Intersex: is a general term used for a variety of conditions in which a person is born with a reproductive or sexual anatomy that doesn’t seem to fit the typical definitions of female or male. For example, a person might be born appearing to be female on the outside, but having mostly male-typical anatomy on the inside. Or a person may be born with genitals that seem to be in-between the usual male and female types—for example, a girl may be born with a noticeably large clitoris, or lacking a vaginal opening, or a boy may be born with a notably small penis, or with a scrotum that is divided so that it has formed more like labia. Or a person may be born with mosaic genetics, so that some of her cells have XX chromosomes and some of them have XY. (Intersex Society of North America, 2011)

Hermaphrodite: The mythological term “hermaphrodite” implies that a person is both fully male and fully female. This is a physiologic impossibility. The words “hermaphrodite” and “pseudo-hermaphrodite” are stigmatizing and misleading words. Unfortunately, some medical personnel still use them to refer to people with certain intersex conditions, because they still subscribe to an outdated nomenclature that uses gonadal anatomy as the basis of sex classification. (Intersex Society of North America, 2011).

Microaggressions: (Racial) microaggressions are brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicates

**Transgressive:** to go beyond limits set by a governing authority. This could be laws (secular or religious), other perceived moral codes, social contracts, and/or norms.

**Transsexual:** Transgender is often mistakenly understood to mean transsexual. Transsexual men (FTMs) and transsexual women (MTFs) actually comprise a minority within the transgender community. They feel profoundly unhappy with their bodies and gender norms associated with their birth sex (Gender Education and Advocacy, 2011).

**Transvestite:** someone whose gender identity corresponds to her/his assignment but who obtains erotic pleasure by dressing as the other gender. Only when the gender of the individual's dress is in conflict with both assignment and identity is that individual labeled transsexual. (Kessler & McKenna, 1978).

**Tribal Affiliation:** the relationship an individual has with a tribe of origin. Often referring to a formal process of being listed as a member, being listed on a tribal registry, and/or having tribal membership documents.

**Ze/Hir:** Pronouns that are gender inclusive. They are used as options to He/Him and She/Her.
Appendix B: Survey Instrument

National Survey on Transgender Experiences of Discrimination in the U.S.

Purpose
You are invited to participate in a research project regarding transgender and gender non-conforming people in the United States. Your responses will be part of an important report on transgender people’s experiences of discrimination in housing, employment, health care and education.

Procedures
You will be asked to complete the attached survey. Your participation and responses are confidential. Please answer the questions as openly and honestly as possible. You may skip questions. The survey will take about 20 minutes to complete. You must be 18 years of age or older to participate. When you have completed the survey, please return it in the enclosed envelope directly to:

Susan Rankin, Ph.D
Research Associate, Center for the Study of Higher Education
Pennsylvania State University
University Park, PA 16802
814-863-2655

Comments provided will be analyzed using content analysis and submitted as an appendix to the survey report. Quotes from submitted comments will also be used throughout the report to give “voice” to the quantitative data.

Discomforts and Risks
There are no risks in participating in this research beyond those experienced in everyday life. Some of the questions are personal and might cause discomfort. In the event that any questions asked are disturbing, you may stop responding to the survey at any time. Participants who experience discomfort are encouraged to contact:

The Trevor Project
866-4-U-TREVOR
The Trevor Helpline is the only national crisis and suicide prevention helpline for gay, lesbian, bisexual, transgender and questioning youth; the Helpline can also help transgender and gender non-conforming adults. The Helpline is a free and confidential service that offers hope and someone to talk to, 24/7. Trained counselors listen and understand without judgment.

Benefits
The results of the survey will be part of an important report on discrimination against transgender people by the National Center for Transgender Equality and the National Gay and Lesbian Task Force to help create better opportunities for transgender and gender non-conforming people. We are grateful to Penn State University’s Center for the Study of Higher Education for hosting the survey and maintaining the integrity of our data.

Statement of Confidentiality
You will not be asked to provide any identifying information, such as your name, and information you provide on the survey will remain confidential. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared. Please also remember that you do not have to answer any question or questions about which you are uncomfortable.
Voluntary Participation

Participation in this research is voluntary. If you decide to participate, you do not have to answer any questions on the survey that you do not wish to answer. Individuals will not be identified and only group data will be reported (e.g., the analysis will include only aggregate data). By completing the survey, your informed consent will be implied. Please note that you can choose to withdraw your responses at any time before you submit your answers. Refusal to take part in this research study will involve no consequences.
Right to Ask Questions

You can ask questions about this research.

Questions concerning this project should be directed to:

Justin Tanis
National Center for Transgender Equality
1325 Massachusetts Avenue, NW  Suite 700
Washington, DC  20005
202-903-0112 jtanis@nctequality.org

OR

Susan Rankin, Ph.D
Research Associate, Center for the Study of Higher Education
Pennsylvania State University
University Park, PA 16802
814-863-2655 sxr2@psu.edu

Completion of the survey indicates your consent to participate in this study. It is recommended that you keep this statement for your records.
Directions

Please read and answer each question carefully. For each answer, darken the appropriate oval completely. If you want to change an answer, erase your first answer completely and darken the oval of your new answer. You may decline to answer specific questions.

“Transgender/gender non-conforming” describes people whose gender identity or expression is different, at least part of the time, from the sex assigned to them at birth.

1. Do you consider yourself to be transgender/gender non-conforming in any way?
   Yes
   No. If no, do NOT continue.

2. What sex were you assigned at birth, on your original birth certificate?
   Male
   Female

3. What is your primary gender identity today?
   Male/Man
   Female/Woman
   Part time as one gender, part time as another
   A gender not listed here, please specify _____________________________

4. For each term listed, please select to what degree it applies to you.

<table>
<thead>
<tr>
<th>Term</th>
<th>Not at all</th>
<th>Somewhat</th>
<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transgender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transsexual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTM (female to male)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTF (male to female)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender non-conforming or gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genderqueer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Androgynous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feminine male</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Masculine female or butch</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>A.G. or Aggressive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross dresser</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drag performer (King/Queen)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-spirit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, please specify</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. People can tell I’m transgender/gender non-conforming even if I don’t tell them.
   Always
   Most of the time
   Sometimes
   Occasionally
   Never
6. I tell people that I’m transgender/gender non-conforming. (Mark all that apply.)
- Never
- People who are close friends
- Casual friends
- Work colleagues
- Family
- Everyone

7. How many people know or believe you are transgender/gender non-conforming in each of the following settings? Mark all that apply.

<table>
<thead>
<tr>
<th>Setting</th>
<th>None</th>
<th>A few</th>
<th>Some</th>
<th>Most</th>
<th>All</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On the job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In private social settings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In public social settings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When seeking medial care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. To the best of your ability, please estimate the following ages, if they apply to you. Mark “N.A.” if not applicable or if you have no desire to transition. Please mark each line.

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age you first recognized that you were “different” in terms of your gender.</td>
<td></td>
</tr>
<tr>
<td>Age you first recognized your transgender/gender-non-conforming identity</td>
<td></td>
</tr>
<tr>
<td>Age you began to live part time as a transgender/gender non-conforming person.</td>
<td></td>
</tr>
<tr>
<td>Age you began to live full time as a transgender/gender non-conforming person.</td>
<td></td>
</tr>
<tr>
<td>Age that you first got any kind of transgender-related medical treatment.</td>
<td></td>
</tr>
<tr>
<td>Your current age</td>
<td></td>
</tr>
</tbody>
</table>
White
% Black or African American
% American Indian or Alaska Native (enrolled or principal tribe)
% Hispanic or Latino
% Asian or Pacific Islander
% Arab or Middle Eastern
% Multiracial or mixed race

12. What is the highest degree or level of school you have completed? Mark ONE box. If you are currently enrolled, please mark the previous grade or highest degree received.
   Elementary and/or junior high
   Some high school to 12th grade
   High school graduate - high school Diploma or the equivalent *(for example: GED)*
   Some college credit, but less than 1 year
   Technical school degree (such as cosmetology or computer technician)
   One or more years of college, no degree
   Associate degree *(for example: AA, AS)*
   Bachelor’s degree *(for example: BA, AB, BS)*
   Master’s degree *(for example: MA, MS, MEng, MEd, MSW, MBA)*
   Professional degree *(for example: MD, DDS, DVM, LLB, JD)*
   Doctorate degree *(for example: PhD, EdD)*

13. What is your current gross annual **household** income (before taxes)?
   Less than $10,000
   $10,000 to $19,999
   $20,000 to $29,999
   $30,000 to $39,999
   $40,000 to $49,999
   $50,000 to $59,999
   $60,000 to $69,999
   $70,000 to $79,999
   $80,000 to $89,999
   $90,000 to $99,999
   $100,000 to $149,999
   $150,000 to $199,999
   $200,000 to $250,000
   More than $250,000

14. How many people live in your household?
   Number __________

15. How many children currently rely on your income?
   Number __________

16. What is your relationship status?
   Single
   Partnered
   Civil union
   Married
   Separated
   Divorced
   Widowed

**Important Note:** When we say: “Because you are transgender/gender non-conforming, has one or two of these things happened to you,” we do not mean that your gender identity or expression
is **causing** bad or abusive things to happen. We are trying to find out if people are treating you **differently** because you are transgender or gender non-conforming.

17. Because I am transgender/gender non-conforming, life in general is:
   Much improved
   Somewhat improved
   The same
   Somewhat worse
   Much worse
   In some ways better, in some ways worse

18. Because I am transgender/gender non-conforming, my housing situation is:
   Much improved
   Somewhat improved
   The same
   Somewhat worse
   Much worse
   In some ways better, in some ways worse

19. If you are or were employed, how has the fact that you are transgender/ gender non-conforming changed your employment situation?
   Much improved
   Somewhat improved
   Stayed the same
   Somewhat worse
   Much worse
   In some ways better, in some ways worse
   Not applicable. I was never employed

20. Because you are transgender/gender non-conforming, how has your situation changed as a parent?
   Much improved
   Somewhat improved
   Stayed the same
   Somewhat worse
   Much worse
   In some ways better, in some ways worse
   Not Applicable. I am not a parent.

21. What are your current living arrangements?
   Homeless
   Living in a shelter
   Living in a group home facility or other foster care situation
   Living in a nursing/adult care facility
   Living in campus/university housing
   Still living with parents or family you grew up with
   Staying with friends or family temporarily
   Living with a partner, spouse or other person who pays for the housing
   Living in house/apartment/condo I RENT alone or with others
   Living in house/apartment/condo I OWN alone or with others

22. Because you are transgender/gender non-conforming, have you experienced any of the following housing situations? Please mark “Not applicable” if you were never in a position to experience such a housing situation. For example, if you have always owned your home as a transgender/gender non-conforming person, you could not have been evicted.
23. If you have experienced homelessness, did you go to a shelter?
   Yes
   No [Go to Question 25]
   Not applicable, I never experienced homelessness [Go to Question 25]

24. Because you are transgender/gender non-conforming, did you experience any of the following when you went to a shelter?

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was denied access to a shelter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was thrown out after they learned I was transgender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was harassed by residents or staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was physically assaulted/attacked by residents or staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was sexually assaulted/attacked by residents or staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was forced to live as the wrong gender in order to be allowed to stay in a shelter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was forced to live as the wrong gender in order to be/feel safe in a shelter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I decided to leave a shelter even though I had no place to go</td>
<td></td>
<td></td>
</tr>
<tr>
<td>because of poor treatment/unsafe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25. What is your current employment status? (Mark all that apply.)
   ☐ Full-time
   ☐ Part-time
   ☐ More than one job
   ☐ Self-employed, own your business
   ☐ Self-employed, contract worker
   ☐ Unemployed but looking
   ☐ Unemployed and stopped looking
   ☐ On disability
   ☐ Student
   ☐ Retired
   ☐ Homemaker or full-time parent
   ☐ Other, please specify ________________________________________________
26. Have you done any of the following to avoid discrimination because you are transgender or gender non-conforming? If you are/were not employed, mark not applicable.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Stayed in a job I’d prefer to leave
- Didn’t seek a promotion or a raise
- Changed jobs
- Delayed my gender transition
- Hid my gender or gender transition
- I have not done anything to avoid discrimination

27. Because of being transgender/gender non-conforming, which of the following experiences have you had at work? Please mark each row.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- I feel more comfortable and my performance has improved.
- I did not get a job I applied for because of being transgender or gender non-conforming.
- I am or have been under-employed, that is working in the field I should not be in or a position for which I am over-qualified.
- I was removed from direct contact with clients, customers or patients.
- I was denied a promotion.
- I lost my job.
- I was harassed by someone at work.
- I was the victim of physical violence by someone at work.
- I was the victim of sexual assault by someone at work.
- I was forced to present in the wrong gender to keep my job.
- I was not able to work out a suitable bathroom situation with my employer.
- I was denied access to appropriate bathrooms.
- I was asked inappropriate questions about my transgender or surgical status.
- I was referred to by the wrong pronoun, repeatedly and on purpose.
- Supervisors or coworkers shared information about me that they should not have.
28. Because of being transgender or gender non-conforming, have any of the following people close to you faced any kind of job discrimination?

<table>
<thead>
<tr>
<th>Use or partner</th>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children or other family member</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29. If you have ever worked for pay in the street economy, please check all activities in which you have engaged.

- % Sex work/sex industry
- % Drug sales
- % Other, please specify __________________________
- % Not applicable. I have never worked for pay in the street economy.

30. Based on being transgender/gender non-conforming, please check whether you have experienced any of the following in these public spaces. (Mark all that apply.)

<table>
<thead>
<tr>
<th>Public Space</th>
<th>Denied equal treatment or service</th>
<th>Verbally harassed or disrespected</th>
<th>Physically attacked or assaulted</th>
<th>Not applicable. I have not tried to access this.</th>
<th>Not applicable. I do not present as transgender here.</th>
<th>Not applicable. I did not experience these negative outcomes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail store</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Hotel or</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Bus, train, or taxi</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Airplane or airport staff/TSA</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Doctor's office or</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Emergency</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Rape crisis</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Mental health clinic</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Drug treatment</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Ambulance or EMT</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Govt. agency/officia</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Police officer</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Judge or court official</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Legal services clinic</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>
31. Have you ever interacted with the police as a transgender/gender non-conforming person?
Yes [Go to Question 32]
No [Go to Question 33]

32. Because of being transgender/gender non-conforming, which of the following experiences have you had in your interaction with the police? (Mark all that apply.)
- Officers generally have treated me with respect
- Officers generally have treated me with disrespect
- Officers have harassed me
- Officers have physically assaulted me
- Officers have sexually assaulted me

33. As a transgender/gender non-conforming person, how comfortable do you feel seeking help from the police?
- Very comfortable
- Somewhat comfortable
- Neutral
- Somewhat uncomfortable
- Very uncomfortable

34. Because of being transgender/gender non-conforming, have you ever been arrested or held in a cell?
Yes
No

35. Have you ever been sent to jail or prison for any reason?
Yes [Go to Question 36]
No [Go to Question 38]

36. How long were you in jail or prison, total?
- Under six months
- Six months to a year
- One to three years
- Three to five years
- Five to ten years
- Ten or more years

37. If you were jailed or in prison, have you ever experienced any of the following because of being transgender/gender non-conforming? (Mark all that apply in each category.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Harassed</th>
<th>Physically assaulted or attacked</th>
<th>Sexually assaulted or attacked</th>
<th>Denied hormones</th>
<th>Denied regular medical care</th>
</tr>
</thead>
<tbody>
<tr>
<td>From other inmates</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>From correctional officers or staff</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>

38. Have you attended school at any level (elementary school or higher) as a transgender/gender non-conforming person?
Yes [Go to Question 39]
No [Go to Question 41]

39. Because you are transgender/gender non-conforming, have you been a target of harassment, discrimination or violence at school? (Mark all that apply.)
40. Because I am/was transgender/gender non-conforming, which of the following statements are true?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes</th>
<th>No</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had to leave school because the harassment was</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had to leave school for financial reasons related to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I lost or could not get financial aid or scholarships.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was not allowed to have any housing on campus.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was not allowed gender appropriate housing on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was not allowed to use the appropriate bathrooms</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

41. What type of health insurance do you have? If you have more than one type of coverage, check the ONE that you usually use to cover doctor and hospital bills.

I have NO health insurance coverage
Insurance through a current or former employer (employee health plan, COBRA, retiree benefits)
Insurance through someone else’s employer (spouse, partner, parents, etc.)
Insurance you or someone in your family purchased
Medicare
Medicaid
Military health care/Champus/Veterans Administration/Tri-Care
Student insurance through college or university
Other public (such as state or county level health plans, etc.)
Other, please specify ________________________________

42. What kind of place do you go to most often when you are sick or need advice about your health? (check one)
Emergency room
Doctor’s office
Health clinic or health center that I or my insurance pays for
Free health clinic
V.A. (veteran’s) clinic or hospital
Alternative medicine provider (acupuncture, herbalist)
Not applicable. I do not use any health care providers

43. Because you are transgender/gender non-conforming, have you had any of the following experiences? (Please check an answer for each row. If you have NEVER needed medical care, please check "Not applicable")

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have postponed or not tried to get needed medical care when I was sick or injured/because I could not afford it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have postponed or not tried to get checkups or other preventive medical care because I could not afford it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have postponed or not tried to get needed medical care when I was sick or injured because of disrespect or discrimination from doctors or other healthcare providers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have postponed or not tried to get checkups or other preventive medical care because of disrespect or discrimination from doctors or other healthcare providers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A doctor or other provider refused to treat me because I am transgender/gender non-conforming.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had to teach my doctor or other provider about transgender/gender non-conforming people in order to get appropriate care.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

44. Please mark below if you received health care related to being transgender/gender non-conforming.

<table>
<thead>
<tr>
<th></th>
<th>Do not want it</th>
<th>Want it someday</th>
<th>Have had it</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hormone treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top/chest/breast surgery (chest reduction, enlargement, or reconstruction)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Male-to-female removal of the testes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male-to-female genital surgery (removal of penis and creation of a vagina, labia, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female-to-male hysterectomy (removal of the uterus and/or ovaries)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female-to-male genital surgery (clitoral release/met</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female-to-male phalloplasty (creation of a penis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

45. Please tell us how much the following procedures have cost if you have had them, or mark the box that says I have NOT had this procedure.

```
<table>
<thead>
<tr>
<th>Procedure</th>
<th>My insurance paid for some or all of this and my out of pocket cost was:</th>
<th>My</th>
<th>I have NOT had procedure</th>
<th>Don't know of pocket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hormone treatment , average MONTHLY cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visits to the doctor to monitor hormone levels, average YEARLY cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest/breast/top surgeries and reconstructions/reductions/enhancements TOTAL cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genital/bottom surgeries TOTAL cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial surgeries TOTAL cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other transition-related health care TOTAL cost. Please describe type of care here. Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

46. Have you ever received a gender-related mental health diagnosis?
No
Yes. My diagnosis: _______________________________________________________

47. Not including any gender-related mental health diagnosis, do you have a disability (physical, learning, mental health) that substantially affects a major life activity?
Yes
No [Go to Question 49]

48. What is your disability? (Mark all that apply.)
   Physical condition
   Learning disability
   Mental health condition

49. What is your HIV status?
   HIV negative
   HIV positive
   Don’t know

50. I drink or misuse drugs to cope with the mistreatment I face or faced as a transgender or gender non-conforming person.
   Yes
   Yes, but not currently
   No
   Not applicable. I face no mistreatment.

51. Have you ever smoked 100 cigarettes in your life?
   Yes
   No

52. Do you now smoke daily, occasionally, or not at all?
   Daily
   Occasionally
   Not at all

53. If you now smoke, would you like to quit?
   Yes
   No
   Not applicable, I do not smoke now

54. Have you ever attempted suicide?
   Yes
   No

55. Because of being transgender/gender non-conforming, have you lived through any of the following family issues? If a situation does not apply to you, please mark “Not applicable.”

<table>
<thead>
<tr>
<th>Issue</th>
<th>Yes</th>
<th>No</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>My family is as strong today as before I came out.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My family relationships are slowly improving after</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My relationship with my spouse or partner ended.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My ex limited or stopped my relationship with my</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A court/judge limited or stopped my relationship with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My children chose not to speak with me or spend time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My parents or family chose not to speak with me or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was a victim of domestic violence by a family member.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have lost close friends.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
56. Please mark the appropriate response about adoption and foster parenting as a transgender/gender non-conforming person.

<table>
<thead>
<tr>
<th></th>
<th>Yes, my partner’s child or children</th>
<th>A child related to me</th>
<th>Yes, a child previously to me</th>
<th>No, I have not tried</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have successfully adopted or fostered a child and was</td>
<td>%e</td>
<td>%e</td>
<td>%e</td>
<td>%e</td>
</tr>
<tr>
<td>I tried to adopt or foster a child and was</td>
<td>%e</td>
<td>%e</td>
<td>%e</td>
<td>%e</td>
</tr>
</tbody>
</table>

57. For each of the following documents, please check whether or not you have been able (allowed) to change the documents or records to reflect your current gender. Mark “Not applicable” if you have no desire to change the gender on the document listed.

<table>
<thead>
<tr>
<th>Document</th>
<th>Yes, changes allowed</th>
<th>No, changes denied</th>
<th>Not tried</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth certificate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drivers license and/or state issued non-driver</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Security records</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passport</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work ID</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military discharge papers (DD214 or DD215)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health insurance records</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student records</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional licenses or credentials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

58. Have you or your employer ever received notice that the gender your employer has listed for you does not match the gender the government has listed for you?

Yes
No
Not applicable

59. Have you ever received notice from your state motor vehicle agency that the gender on your driver’s license does not match the gender the federal government has listed for you with Social Security?

Yes
No
Not applicable

60. Thinking about all of your IDs and records, which of the following statements is most true?

All of my IDs and records list the gender I prefer.
Some of my IDs and records list the gender I prefer.
None of my IDs and records list the gender I prefer.

61. When I present documents with my name and gender (like a driver’s license or a passport) that do not match the gender I present as: **(Mark all that apply.)**

- %e I have been harassed.
- %e I have been assaulted/attacked.
- %e I have been asked to leave.
- %e I have had no problems.
Not applicable. I have only presented documents that match.

62. Please check what you believe are the four most important policy priorities affecting transgender/gender non-conforming people in the U.S.
- HIV prevention, education and treatment
- Better policies on gender and identity documents and other records
- Passing anti-bullying laws that make schools safer
- Transgender/gender non-conforming prisoner’s rights
- Immigration policy reform (such as asylum or partner recognition)
- Allowing transgender/gender non-conforming people to serve in the military
- Access to transgender-sensitive health care
- Getting transgender-related health care covered by insurance
- Protecting trans/gender non-conforming people from discrimination in hiring and at work
- Protecting transgender/gender non-conforming people from discrimination in housing
- Passing laws that address hate crimes against transgender/gender non-conforming people
- The right of transgender/gender non-conforming people to parent, including adoption
- The right to equal recognition of marriages involving transgender partners

63. What is your U.S. citizenship status?
- U.S. citizen
- Documented non-citizen
- Undocumented non-citizen

64. Are you registered to vote?
- Yes
- No

65. Have you ever been a member of the armed forces?
- Yes [Go to Question 66]
- No [Go to Question 67]
- I was denied entry because I am transgender/gender non-conforming [Go to Question 67]

66. Were you discharged from the service because of being transgender/gender non-conforming?
- Yes
- No or still in the military

67. What are your household’s current sources of income? (Mark all that apply.)
- Paycheck from a your or your partner’s job
- Money from a business, fees, dividends or rental income
- Aid such as TANF; welfare; WIC; public assistance; general assistance; food stamps or SSI
- Unemployment benefits
- Child support or alimony
- Social security, workers comp, disability, veteran’s benefits or pensions
- Inherited wealth
- Pay from street economies (sex work, other sales)
- Other, please specify __________________________

69. What is your sexual orientation?
- Gay/Lesbian/Same-gender attraction
- Bisexual
- Queer
- Heterosexual
- Asexual
- Other, please specify __________________________
70. Anything else you’d like to tell us about your experiences of acceptance or discrimination as a transgender/gender non-conforming person?