

**URBAN AMERICAN INDIAN ADOLESCENT GIRLS:
FRAMING SEXUAL RISK BEHAVIOR**

by

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For my husband, Dave, and my sons, Sam and Pete. Thank you for supporting me and loving me no matter what crazy new “plan” I come up with. Knowing that I have you all to come home to at the end of each day makes me the luckiest person in the world. I love you boys so much.

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CHAPTER I

Introduction

Adolescent sexual risk behavior can have devastating effects including unintended pregnancy, HIV/AIDS, and sexually transmitted infections (STI). Adolescents who engage in sexual risk behaviors are more likely to use illicit drugs, drink alcohol, be involved in violence, and run away from home (Garwick, Rhodes, Peterson-Hickey, & Hellerstedt, 2006). Sexual risk behavior is defined as the non-use of appropriate contraceptive/protective techniques to reduce the risk of unintended pregnancy, HIV/AIDS or STI. It also includes lack of planning for when sexual activity will occur and with whom.

Healthy People 2020 adolescent priorities (US Department of Health and Human Services, 2010) emphasize the need to: (a) reduce the proportion of adolescents and young adults with Chlamydia trachomatis infections, (b) reduce gonorrhea rates, (c) reduce pregnancy rates among adolescent females, and (d) reduce new HIV infections among adolescents and adults. According to the Centers for Disease Control (CDC) (2011b), 45.7% of high school girls reported engaging in sexual intercourse. Between 2005 and 2007, there was a 5% increase (42.5 births per 1,000 teens age 15 to 19) in the U.S. birth rate among the 15-19 year old age group (Hamilton, Martin, & Ventura, 2009). However, in 2009, the pregnancy rate dropped to the lowest in 70 years (39.1 births per 1,000

teens ages 15 to 19) (Ventura & Hamilton, 2011). Yet, even with the decrease in pregnancy rates minorities are still two to three times more likely to become pregnant compared to their White counterparts. Simultaneously, the United States' adolescent pregnancy rate is six to nine times higher than other developed nations (CDC). In addition, the chlamydia and gonorrhea rates have stayed alarmingly high. In 2009, girls 15-19 years old contracted chlamydia at a rate of 3329.3 per 100,000 and gonorrhea at a rate of 568.8 per 100,000 (CDC, 2010).

American Indian (AI) adolescent girls have higher rates of sexual activity, births and STIs than the national average. In this study, the term American Indian will be used to describe the racial background of participants. American Indian was how the girls described themselves and one another. Similarly, the participants also referred to themselves and one another as girls. Therefore, throughout this paper, participants will be called girls. In 2009, there were 55.5 births per 1,000 15-19 year old AI girls (CDC, 2011b). Between 2005 and 2007, the AI adolescent pregnancy rate increased 12%, more than any other racial or ethnic group in the United States (National Campaign to Prevent Teen and Unplanned Pregnancy (NCPTUP), 2008a). AI adolescent girls contract chlamydia and gonorrhea at higher rates than their adolescent counterparts. American Indian 15-19 year old girls contracted chlamydia at a rate of 4619.3 per 100,000 (almost one and a half times greater than the national average) and gonorrhea at a rate of 494.9 per 100,000 (CDC, 2010). Although the gonorrhea rate is lower than the national average, it is the second highest rate among

ethnicities (second only to African Americans), three times greater than White adolescent girls, and almost twice the Hispanic adolescent girl rate (CDC, 2010).

HIV/AIDS is currently increasing in the AI community. As a population, American Indians rank third in HIV/AIDS infections with a rate of 10.4 per 100,000 cases with women accounting for 29% of all newly reported cases (CDC, 2008). This is higher than the White population (8.8 per 100,000) and has been higher since 1995 (CDC). However, according to the CDC many AIs are being misclassified as other races and this could lead to erroneous underestimation of the magnitude of the problems. For example, in Los Angeles 56% of those American Indians/Alaska Natives living with AIDS were misclassified as another race in data collection (CDC). This significant population, 2% of all 15-19 year old girls, is often overlooked not only in national data collection processes, but also in sexual risk prevention research (NCPTUP, 2005).

AI adolescents were shown to be at a twofold risk of engaging in sexual behaviors compared to Whites in Rutman, Park, Castor, Taulii, and Forquera's (2008) analysis of the 1997-2003 Youth Risk Behavior Survey data. They concluded that sexual risk reduction interventions need to focus on AI adolescents, specifically on urban AI adolescents. The Indian Health Service (2008) concluded

Urban Indians not only share the same health problems as the general Indian population; their health problems are exacerbated in terms of mental and physical hardships because of the lack of family and traditional

cultural environments. Urban Indian youth are at greater risk for serious mental health and substance abuse problems, suicide, increased gang activity, teen pregnancy, abuse, and neglect. Recent studies of the urban Indian population document poor health status and reveal that lack of adequate health care services are a serious problem for most families.

(Indians in Urban Areas, para. 2)

Yet, most of the research on AIs in the United States is not focused on urban AIs, but instead is conducted with large reservation-based tribes in the Midwest, Northern Plains, and Southwest.

Understanding urban AIs can be challenging because of the relative heterogeneity of the group. However, current estimates show fewer than 40% of AIs in the United States currently live on reservations or in rural areas (National Urban Indian Family Coalition, 2007). Many urban AIs continue to maintain connections with reservations and tribal land areas. However, simply by living in an urban area, AIs are exposed to various tribal cultures as well as the dominant culture. Adding to this complexity is the fact that urban AIs are not clustered in a specific geographic region within cities (such as the Polish community in Baltimore or the Italian community in New York City), but rather are spread across urban areas. Lobo (2001) contended that the urban Native community “is not a geographic location with clustered residency or neighborhoods, but rather is fundamentally a widely scattered and frequently shifting network of relationships” (pp. 74-75). This scattered geographic distribution has led to the creation of large AI community centers that represent a wide range of diverse

tribal beliefs, heritage and history. This diversity makes the urban AI unique and underscores the need for health research with the population.

Statement of the Problem

Research on adolescent AI girls' sexual risk behavior is limited compared to sexual risk research with African American, Hispanic, and Caucasian adolescents. Although the AI population is a small fraction of the overall US population, the pregnancy rate among the group is higher than the national average (NCPTUP, 2007). Simultaneously, the gonorrhea and chlamydia rates for AI adolescents are significantly higher compared to their white counterparts (CDC, 2010). There have been many studies conducted on sexual behavior with White, African American and Hispanic adolescents. However, because of the cultural differences in the AI girl adolescent population, especially those living in urban areas, and the historical oppression (e.g. forced removal from traditional lands, boarding school requirements, suppression of native language, and obligatory conversion to western religions) that the AI population has faced, it is difficult to generalize the results from previous studies to this unique population (Horn, 1983).

According to the NCPTUP (2008a) culturally sensitive Native youth programs are needed to address the STI and pregnancy rates in the community. Yet, there are currently no rigorously tested sexual health interventions specific to the AI community. However, although intervention programs are the ultimate goal, prior to being able to develop interventions, a theoretical model is necessary. A theoretical model that fits the urban AI adolescent girl population is

needed in order to ensure that health interventions are targeting specific goals and outcomes. It is imperative to address the health disparities experienced by this segment of our population.

The development of a theoretical model to explain the sexual risk behavior of urban adolescent AI girls is needed. The theoretical model would be instrumental in guiding future research focused on reducing sexual risk behavior among urban adolescent AI girls. Understanding the relationship between the individual, the family, the friends, the environment, the community, the tribe, and national policy is imperative for creating a culturally appropriate theoretical model that can guide research for this marginalized population.

Purpose

The purpose of this grounded theory study was to explore how individual, family, environmental, community, tribal factors and processes, and national policy influence urban adolescent AI girls' in sexual risk behavior as a basis for developing a theoretical model. Perceptions and experiences of AI adolescents between the ages of 15 and 19 who live in an urban area were elicited in order to discover how the individual, family, tribal, and national processes affect their sexual behavior (e.g. decisions to remain abstinent, engage in safe sex, or engage in unsafe sex). Event history calendar data, a four-year history of social events and behaviors, were collected from the participants to facilitate analysis of context. Symbolic interactionism (SI) (Mead, 1934; Blumer, 1969) and an adapted ecological model (Bronfenbrenner, 1977) were used to guide the grounded theory approach. Ultimately, a grounded theory explaining the AI

adolescent girl's psychosocial processes and contextual factors related to sexual risk behaviors was developed.

Research Questions

Little information is available concerning urban adolescent girl AIs and their perception of sexual risk behavior. Therefore, a qualitative study was appropriate for research because it facilitates exploration and description of personal experience and meaning in specific contexts (Creswell, 2003). Glaser's (1978, 1992) method on grounded theory was used to explore the psychosocial processes and contextual factors related to sexual risk behavior in American Indian adolescent girls.

According to Lincoln and Guba (1985), grounded theory research is important for formulating understanding of local scenarios that would go unexplained and implicit if not researched. Stern (1980) supported rigorous use of grounded theory research method to promote the discovery of accurate and useful analyses of social processes relevant to nursing science. Egan (2002) argued "theory development from grounded theory research has been identified as having the capacity to predict" (p. 2002). He further contended that grounded theory may produce identifiable hypotheses for research testing.

Grounded theory methodology was used because it allows the researcher to investigate a phenomenon where little is currently known. It also allows the researcher the opportunity to explore the participants' world and develop a theoretical model based upon observations and interactions. Using inductive and deductive reasoning, grounded theory methodology enabled the researcher to

explore and more fully understand the psychosocial processes and contextual factors involved in urban AI adolescent sexual risk behavior.

The primary research question in this study was: How do psychosocial processes and contextual factors influence the urban American Indian adolescent girl's sexual risk behavior? The specific aims of the study include:

1. Identify how individual (microsystem) psychosocial processes influence urban AI adolescent girls' sexual behavior.

A. How do individual psychosocial processes and contextual factors (e.g. future orientation, risk perceptions, age, education) influence adolescent AI girls' sexual risk behavior?

B. What processes/factors influence urban adolescent AI girl's decisions to abstain from sexual intercourse or engage in sexual intercourse (including with whom, when, and whether birth control or condoms are used)?

2. Identify family (mesosystem), friend, and community/environmental contextual factors that influence urban AI adolescent girl sexual risk behavior.

A. How do family/friends/community beliefs, attitudes, and messages influence urban adolescent AI girls' sexual risk behavior?

B. How does the socioeconomic status of the family and the environment (including education level, access to health services,

and urban living conditions) influence the adolescent's sexual risk behavior?

3a. Identify tribal, cultural, and historical (macrosystem 1) contextual factors that influence urban AI adolescent girls' sexual risk behavior.

A. How do cultural and historical processes influence adolescent AI girls' sexual risk behavior?

B. How do tribal economics influence sexual risk behavior?

3b. Identify national policy (macrosystem 2) context that influences urban AI adolescent girls' sexual risk behavior.

A. How do national policies regarding access to health care and economic policies influence adolescent AI girls' sexual risk behavior?

The use of event history calendars and culturally appropriate talking circles were utilized to allow each participant to fully explore their experiences and reflect on their sexual behavior.

Significance for Nursing and Healthcare

This research study is significant to nursing and healthcare in several ways. First, the results of this grounded theory study will improve understanding of the psychosocial processes and contextual factors that influence urban AI girl sexual risk behavior. This marginalized, culturally unique population is often overlooked in nursing and healthcare research. This grounded theory research can help researchers better understand the population so that future studies can better address the unique needs of the population. Additionally, understanding

the unique processes and factors influencing the AI adolescent girl population may encourage more research with this population.

Second, theory drives research questions and interventions. Conducting research without a culturally appropriate theoretical model can result in research that does not address relevant variables for the population of interest. The creation of a culturally driven theory or model may result in the development of more appropriate, adolescent-centered sexual risk reduction interventions. These interventions could facilitate sexual risk reduction for individual AI adolescents, as well as address preventable health problems and conditions with the larger population.

Chapter two will present a literature review of the current research on AI adolescent girl sexual risk behaviors, review of theoretical frameworks currently being used with the population in research studies, and an overview of symbolic interactionism and the adapted ecological model. Chapter three will present the research methods, including event history calendars, talking circles, and individual interviews, as well as the data collection and analysis process.

CHAPTER II

Review of the Literature

This grounded theory research study aims to develop a better understanding of the various psychosocial processes and contextual factors relevant to urban American Indian adolescent girl sexual risk behavior. The literature review is divided into three distinct sections. It begins with an overview of the place of literature reviews within grounded theory research method. This section will give more information about grounded theory method and its appropriateness for this particular research study. Second, the literature review will present an overview of the current research literature on AI adolescent girl sexual risk behavior divided by rural versus reservation and those with theoretical frameworks and those without. This section is necessary to show how often theoretical frameworks are either not used in research with AIs or are not culturally appropriate. However, this section will present two theoretical models that were specifically designed for AIs, yet focus primarily on those AIs living on reservations and rural areas. Finally, an ecological model will be used to compare what is known about other adolescent populations to what is known about American Indian populations. This final section is important in order to highlight the current lack of information available on AIs as a population.

As part of the literature review, there will be considerable overlap between the second and third sections. The same articles may be presented in both sections, but to illustrate different points. This allows the reader to have a better understanding of the current lack of a culturally appropriate theoretical framework, the differences between the reservation and rural population, and the current lack of knowledge about American Indian adolescents.

Grounded Theory Literature

Literature reviews are prerequisites for the majority of research projects. However, literature reviews present a challenge for those interested in grounded theory research. According to Glaser (1998), literature reviews are problematic for grounded theory researchers because they constrain the researcher's ability to keep an open mind with respect to concepts, problems, and interpretations.

Glaser contended:

Grounded theory's very strong dicta are a) do not do a literature review in the substantive area and related areas where the research is to be done, and b) when the grounded theory is nearly completed during sorting and writing up, then the literature search in the substantive area can be accomplished and woven into the theory as more data for constant comparison. (p. 67)

If a researcher chooses to use grounded theory method and conduct a literature review in advance, Glaser argued that the researcher risks six potential problems. These problems include: 1) fixating on concepts that are irrelevant or do not fit; 2) developing preconceived, "professional" problems that are not

relevant and only lead the researcher away from the actual substantive issues; 3) engaging in speculative, non-scientific work that causes the researcher to make decisions about the data that are not relevant to the work; 4) feeling overwhelmed by other author's work, which leads the researcher to feel as though their own work is lacking merit or value; 5) making the researcher more closely align to the current literature and not maintain an open mind to the emerging theory; and 6) presenting problems for the researcher because understanding which literature is relevant to the emerging theory does not begin until data analysis occurs and a substantive theory begins to form.

However, although Glaser (1998) firmly believed that early literature reviews were counterproductive to the grounded theory method, he stated that there are exceptions. The two exceptions are dissertation proposals for those seeking a PhD and grant submissions. Glaser acknowledged that a literature review is a required piece of a dissertation proposal for most academic institutions. Therefore, it is next to impossible to change the requirements in academic institutions. But, doctoral students can attempt to stay focused on the method by first remembering that the literature available is not the absolute authority on the subject and second using "his review into data collection to be constantly compared as the review is done" (Glaser, p. 72). In this way, the researcher can maintain distance from the literature and ensure that during data analysis the literature is put into a proper perspective.

By using the literature as a constant comparison rather than as an authoritative guide, an emerging grounded theory can be exceptionally strong

(Glaser, 1998). For this dissertation, a literature review will be completed. However, the researcher will utilize Glaser's advice on managing information from a literature review in grounded theory method. The literature review will sensitize the researcher to the current state of the science regarding adolescent AI girl sexual risk behavior and will be used as a constant comparison during the data analysis process.

Theoretical Models in American Indian Research

Theory is of utmost importance to nursing practice and research. Whall (1993) encouraged the use of theory and argued that nursing as a discipline will regress if nurses do not utilize theory in their research. Subsequently, Fawcett (2004) asserted, "...only when theory and research are integrated do both become non-trivial; and only then can they contribute to the advancement of science" (p. 11). It is imperative that nursing research be rooted in a sound theoretical framework that is culturally appropriate and testable. This section will briefly discuss the place of theory in research and then compare the current literature related to AI adolescent girl sexual risk behavior in the context of those with a theoretical underpinning and those without. Within these two groups, the research will be further categorized as reservation versus urban research.

In quantitative research, theoretical frameworks or models drive hypothesis formation and testing. Theories or models are imperative to determine the current and future direction of the quantitative research. In qualitative research, there is often a focus on the exploration of the unknown and, therefore, a theoretical framework or model is not always necessary during

data collection. However, a theoretical framework or model can help researchers interpret data during the analysis phase or enhance the discussion of the results.

The current literature available on adolescent AI sexual risk behavior is minimal. Furthermore, these studies are often descriptive, focused broadly on risk behaviors (such as drinking or suicide with only minimal information related to sexual behavior), and often do not utilize an appropriate theoretical model to guide the research. This portion of the literature review is focused on the current lack of culturally appropriate theoretical frameworks for adolescent AI sexual risk behavior. In fact, a literature search for theories related to AI adolescent girl's sexual risk yielded only two theoretical models related to youth sexual risk behavior. One model was developed based upon a larger mixed method study with Northern Plains Indian youth (Kaufman, 2007) and the other an ethnographic study conducted with adult Cherokee males concerning self-reliance (Lowe, 2002) and later applied to Cherokee youth and their perception of HIV/AIDS and hepatitis C (Lowe, 2008).

Since limitations exist related to AI adolescent specific theory, a literature review was performed to identify models and theoretical frameworks that were currently being used in AI adolescent girl sexual risk behavior research. The Cumulative Index of Nursing and Allied Health (CINAHL) and Ovid MEDLINE databases were searched using the keywords *American Indian, Native American, Adolescent, Sexual Risk, Sexual Risk Behavior, and Sexual Behavior*. Terms were autoexploded when the option was available within the databases. Manual searches of relevant nursing, public health, and medical journals as well as

review of the reference lists of the articles retrieved followed. The search was limited to the English language and adolescents (age 13-18). There were no boundaries for dates of publication based upon the general lack of research in the area.

Using the search criteria, 100 articles were retrieved of which 83 were excluded for one or more of the following reasons: 1) The study was not conducted on adolescents in the United States; 2) The study focused primarily on other risk behaviors such as suicide, alcohol use or drug use; 3) The study was primarily interested in adolescent sexual orientation and subsequent sexual risk behaviors; 4) The focus of the study was adults and included some adolescents who were 18 or 19; and 5) The study only included male subjects.

A comprehensive literature search yielded 17 articles specific to AI adolescents and sexual risk behavior. No articles were found that had a theoretical framework specific to urban based adolescent AI girls. The articles that were found fell within two distinct categories: those that were conducted with reservation and rural based adolescent AI populations and those conducted in urban areas. Within each of these sections, the article was evaluated for the content and the use of a theoretical framework. The following sections will address the results of the literature review.

Reservation or Rural Based Research

Those without theoretical frameworks. Four studies focused on reservation and/or rural based AI adolescents and none used a theoretical framework in their analyses. Two of the articles were primarily epidemiological in

nature. Gorgos, Fine and Marrazzo (2008) conducted a retrospective data analysis of office visits with American Indian/Alaska Native 15-24 year olds in an Indian Health Service health care region X (N = 7374). Data from office visits were analyzed for chlamydia diagnostic test collection. Trends in population and positivity were examined and compared to non AI/AN women tested in a similar area at similar times. AI/AN chlamydia rates increased during the study period and were higher than the comparison group by 1.5-2.2 times. Risk factors for a positive chlamydia test included young age, pregnancy visit, or partner or self with chlamydia in the previous year. Limitations included that only AI/ANs receiving care in region X were included in the study and visits were not single visits. Therefore, participants could have been counted more than once if they appeared multiple times for chlamydia testing. Yet, despite the limitations, the authors concluded that AI/ANs consistently had higher levels of chlamydia than non-Native women. The authors recommended increased screening and enhanced surveillance for the populations (Gorgos, et al.).

Similarly, Dicker, Mosure, Kay, Shelby, and Cheek (2008) also conducted a retrospective data analysis to determine the chlamydia positivity and risk factors for chlamydia among women screened in IHS clinics participating in a national program in 2003. Data collected from IHS sites in Montana, South Dakota, and North Dakota were included in the study (N = 11,485). Chlamydia results from women served in IHS facilities were examined and compared to non AI/AN women served by similar clinics in the region. Multivariate logistic regression modeling was utilized. Chlamydia positivity was highest among 15-19

year olds. Positivity decreased with age, but still remained high. Young age and multiple sex partners were associated with increased risk. A limitation to the study was the limited geographic area sampled. AI/ANs in the Northern Plains area can be distinctly different than other reservation or rural AIs. The authors concluded that it is necessary to encourage chlamydia screening and treatment in any program aimed at the AI/AN woman to improve overall reproductive health.

Both Gorgos et al. (2008) and Dicker et al. (2008) focused on chlamydia positivity in two different regions of the United States. However, although the geographic locations for the two studies differed, the results were similar. Both research groups concluded that chlamydia positivity was increased in the AI/AN population in the region compared to the White population in the same geographic location. Similarly, women who were younger and those who had more sexual partners were at an increased risk of contracting chlamydia.

The lack of a theoretical framework for these two studies seemed appropriate based upon the nature of the work. The authors were attempting to give background data and trends within the population. Their article was not theoretically based due to the nature of the research. Their sole intent was to show that there is indeed an issue with chlamydia infections in the AI population. Future research would need to utilize a theoretical framework for interventions and possible exploration of causes of the behavior. However, at these early stages of description, a theoretical framework did not seem necessary to ensure the information was transmitted scientifically.

The second group of articles in this area included Pothoff et al. (1998) and Blum, Harmon, Harris, Bergeisen, and Resnick (1992). Both could have benefitted from the use of a theoretical framework. Both research groups utilized the data from the National Indian Adolescent Indian Health Survey, a 162 item questionnaire administered to nonurban schools in eight IHS areas (N = 13,923). Pothoff et al. conducted an exploratory factor analysis on the 162 item questionnaire data. The authors eight factors for older adolescent boys and girls as well as younger adolescent boys; only seven factors were identified for younger adolescent girls. The difference in factoring varied in each group; however one commonality was that the sexual risk factor, substance use factor, and suicide factor remained relatively constant across all groups. Consequently, Pothoff et al. found a strong correlation between substance use and sexual risk behaviors as well as suicide. The limitation for this study was that the authors only used half of the available sample for factor analysis and only included reservation based youth. Subsequently those not enrolled in school were not included in the data analysis.

Similarly, Blum et al. (1992) used the same data set (N = 13,454) and concluded that AI youth were half as likely to use contraception when engaging in intercourse and had significantly higher rates of injuries, death suicide and abuse compared to their white counterparts in the same region. The limitations for this study included the fact that Navajo youth were overrepresented and those who did not attend school were not included in the data analysis.

These two studies could have benefited from a theoretical model. Why did Pothoff et al. (1998) decide to conduct a factor analysis? What guided the questions that the team was asking? Similarly, why did Blum et al. (1992) focus on the aspects of the survey that they did? A theoretical framework would have strengthened the data analysis and helped strengthen the conclusions that each research team reached. Similarly, the use of a theoretical framework could have helped guide a discussion on future research and next steps in each article.

The latter two researchers did not provide a rationale for their data analysis. Instead, they presented extensive descriptive results that would have been better served in the context of a theoretical framework. Having a theoretical model would have informed the reader on the rationale for data analysis and based upon the results could have shown a clear next step in the research process. Accordingly, their results leave the reader with the question of where to go next. There were many research implications in the studies, such as the high rates of sexual risk behavior in the AI youth population and the difference between young girl AIs compared to older adolescents. A theoretical framework could have helped make the next steps in the research process more clear to readers.

Those with theoretical frameworks. Seven of the studies using a theoretical framework in the literature review focused primarily on reservation and/or rural based AIs. Of the seven studies reviewed, only two used a framework specifically designed for AIs and none of the frameworks were grounded in the lives, meaning or perceptions of urban AI adolescent girls.

Kaufman et al. (2007) developed a model regarding adolescent sexual risk based upon Walters and Simoni's (2002) Native women's stress-coping model. Kaufman et al. used focus groups, individual interviews, and survey data from Northern Plains AI youths. They determined that sex was normalized by the adolescent population, often occurred after alcohol consumption, and those having sex viewed STIs as a treatable medical condition without long-term consequences. They also concluded that early childbearing was not generally idealized within the population. Yet, there were few consequences for young mothers or fathers because children were absorbed into the larger family network. Kaufman et al. argued that "youthful childbearing may not entail the costs or burdens that often exist elsewhere" (p. 2161).

The model developed by Kaufman et al. (2007) specifically focused on culture (those positive elements of tribal life that provide a source of strength to members of the community) and stressors (including historical trauma, discrimination, and marginalization) (See Figure 1). The major tenet of the model is that stress and coping are predominant factors for AI youth. The researchers presuppose that stress (particularly stress associated with abuse and violence) is a necessary antecedent for negative health outcomes and do not consider other factors such as family relationships in their model.

According to Kaufman et al. (2007), culture is important when determining the protective factors in this group of Northern Plains Indians. However, urban based AI youths might not have that same level of cultural connectedness as AIs living within a homogenous community. Similarly, the geographic location could

factor into the results. Those living in outer lying regions of the United States have different lifestyles and living conditions compared to those living within urban boundaries.

The model developed by Kaufman et al. (2007) is too basic and not generalizable to other populations, particularly those who lived within an urban area and have various levels of connectedness to their culture compared to those on reservations. The adapted model was initially built before data analysis. During the analysis, there were small changes made to the model, but the model as a whole remained relatively stable. Based upon this process, it seems necessary for a model to be developed from the ground up rather than beginning with a large idea and modifying it as needed. Rather than using presupposed notions of what influences AI youth to have sex, it would be more beneficial to ask the questions and then develop the model. Therefore, a grounded theory study is needed to bridge the gap and develop a framework that is unbiased and based upon the perceptions and meanings of the adolescents, not the researchers.

Lowe (2008) utilized the Cherokee Self-Reliance theoretical framework, which was specifically designed for those AIs who self-identified as Cherokee. The original model was developed by Lowe (2002) and used an ethnographic approach with in-depth interviews. Lowe (2002) found that Cherokee self-reliance was an important part of the Cherokee male persona and could be incorporated into health care (See Figure 2). In his work with youth, Lowe (2008), using a descriptive correlational design, examined the relationship

between Cherokee self-reliance and attitudes and behaviors about HIV/AIDS and hepatitis C. Cherokee youth living within the Cherokee nation (N = 41) participated in the study.

Lowe's (2008) study found a negative correlation between Cherokee self-reliance and their knowledge and attitudes on the pre and post-tests. Lowe found a correlation between attitude, knowledge and behavioral intentions. He concluded that the negative correlation between Cherokee self-reliance and behavioral intention was due in part because HIV/AIDS were seen as diseases not "fitting" with the Cherokee culture. The primary limitation to this study was that the participants were all Cherokee nation members. Also, the author was himself a Cherokee nation member, potentially biasing his perspective. Yet, his membership could also have been a positive as it gave him an additional layer of knowledge of the culture and value system.

However, although Lowe's (2008) work is meritorious, it is restricted to the Cherokee Nation and may not fit an urban population. As in urban areas represent diverse tribes and backgrounds. Therefore, to use a theoretical model that is specific to a single tribe could hinder future research. The other four studies used comprehensive, multidimensional theoretical frameworks, often from sociology and psychology (e.g. Social Cognitive Theory and Jessor's Problem Behavior Theory).

Although five studies used a comprehensive, multidimensional theoretical framework to guide data collection and analysis, the studies still vary greatly. The research available on AI youth is quite eclectic and researchers are still

working to determine if ideas and thoughts are feasible and what the risk factors and protective factors are within the population. Thus, there was no single theme related to sexual risk behavior that emerged from the literature review.

For example, Kaufman et al. (2010) utilizing Bandura's Social Cognitive Theory (SCT) as a guide developed a "Circle of Life" HIV prevention intervention with Northern Plains 11-15 year old youth. Social cognitive theory was adapted to emphasize four components of health (e.g. spiritual, mental, emotional, and physical wellness) using the cultural symbol of the medicine wheel as a representation of the SCT. The intervention was a two wave, randomized control trial surveying adolescents (N = 552, N = 541) and their parents living on a reservation in a Northern Plains area. The researchers focused primarily on the methodology and its effectiveness for recruiting participants and parents to the study. Yet, their initial analysis determined that Northern Plains youth are initiating sexual activity young and sexual activity often follows alcohol or drug use. However, even with the early initiation of sexual activity among some participants, the condom use rate was 71%. Limitations for this study include a homogenous, reservation based population as well the inability to contact almost a quarter of the parents.

Social Cognitive Theory was also used in other studies. Mitchell, Kaufman, and Beals (2005) conducted a longitudinal cohort study using Social Cognitive Theory as a framework for data collection and analysis. Participants were Northern Plains AI youth involved in the VOICES/CHOICES projects over a four-year period (N = 518). Researchers measured self-efficacy and sexual risk

and concluded that resistive efficacy, or the ability to resist external pressure, in adolescents increased as they aged and was related to decreasing number of partners based upon the Social Cognitive Theory. Subsequently, women in the study had higher levels of resistive efficacy across all time periods although both genders increased resistive efficacy over time. Over a four-year period, women had fewer sexual partners initially, but the numbers increased over time and then decreased. The strengths of this study were its large sample size as well as the researcher's longitudinal design. The limitations for this study include the limitations associated with studying only one geographic area and the fact that participants were from a rural/reservation based tribe.

Although Chewning et al. (2001) also studied self-efficacy, the purpose of the project also included identifying salient characteristics of students and their perceptions of family, school, and friends that could be incorporated or supported in future programs. Chewning et al. used Jessor's Problem Behavior Theory to frame their study and administered 144 item surveys to youth enrolled in grades six through twelve in rural schools throughout the Midwest (N = 484). The authors determined that self-efficacy, peer risk behaviors, and parental relationships were most important to adolescents in decisions regarding sex. They also determined that abstention from intercourse and/or consistent use of birth control was associated with lower risk behavior of peers, higher perceived parental support and knowledge, and value on success. The limitations for this study include geographic exclusivity, inability to account for those not enrolled in school or absent from school when the survey was administered, and the

measures used for self-esteem and cultural connectedness were adapted and preliminary. However, Chewing et al. concluded that rural/reservation AI youth are strongly influenced by their family and community and that these protective factors can help students avoid risk.

The third study, Oman et al. (2006), used the Social Development Model as a guide for the explorative, investigative study. The authors administered risk behavior questionnaires to adolescents, age 13-19 living in Oklahoma via a computer (N = 126). Questionnaires were based upon nine assets that were developed and piloted. Factor analysis was conducted on the nine assets. Oman et al. found that adolescents with non-parental role models were 3.8 times more likely to have never had sex and those 15-17 year olds with future aspirations were less likely to engage in sexual risk behaviors. A major limitation to the study was that factor analysis results were not strong. One of the nine assets had only one question that loaded onto the factor, two assets only had two questions loaded on the factor, and one asset had only four questions loaded on the factor. Another limitation was the limited geographic area surveyed, the rural population, and the fact that Oklahoma has a large Cherokee tribal base, making it possible that the participants were largely homogenous.

Finally, the last study that used a theoretical framework was Baldwin et al. (1996). Baldwin et al. used Social Action Theory to guide program design of a HIV/AIDS school-based intervention. The participants were AI adolescents in eighth and ninth grade living on a reservation in Northern Arizona. Baldwin et al. reported how the Native American Prevention Project against AIDS and

Substance Abuse was developed and discusses critical processes in development. Their school based curriculum included qualitative focus groups prior to starting the project and was followed by pilot testing and a 48-class session intervention. The researchers concluded that to find success, researchers must choose an integrative theory, use an ethnographic methodology, and use process and outcome evaluations in pilot and field trials. They also demonstrated that multi-component preventive intervention curricula based on the Social Action Theory are adaptable to the AI reservation environment.

The variety of results and limited approaches reported in the research support the need for further adolescent AI sexual risk behavior research. For example, of all the studies reviewed, only one study specifically involved an intervention and described its efficacy. Baldwin et al. (1996) found that it was possible to design an intervention that was appropriate and efficacious for the AI culture using an ethnographic approach. The research team first used the community's participation to determine what intervention would be appropriate, piloted the intervention, and conducted two phases of the intervention. The results from this project highlight the significance of using an integrative theory, ethnographic methodology, and process and outcome evaluations in pilot and field trials. However, since 1996, no other intervention studies specific to AI adolescent girl sexual risk, particularly those in urban areas, were identified. Subsequently, the interventions that are available tend to focus on adults and

HIV/AIDS. Other sexually transmitted infections should be addressed within the broader topic of safe sex and the implications of early childbearing.

Currently, there are multiple hypotheses concerning the factors influencing AI adolescents' decision to have sex, but the focus is broad and not consistently agreed upon among researchers. This literature review indicates that AI adolescent sexual risk behavior is not well understood. Therefore, researchers are generally conducting exploratory, descriptive studies in an attempt to begin building the body of knowledge and provide a foundation for further research focused on AI adolescent sexual risk behavior.

Although 60% of AIs live in urban areas, the majority of research reviewed is focused on AIs living on reservations and rural AIs. Some of the researchers had connections with the tribe and that is why they were the population included (Lowe, 2008; Chewning et al., 2001). The national survey data utilized in various studies also focused on reservation and rural AI adolescents. Although research with AI populations is needed in general, the focus on reservation and rural AIs might be explained based upon researchers' perception that data collection with reservation-based AIs is potentially more manageable due to the reservation's cultural homogeneity as well as ease of accessibility if a researcher has an established relationship with the tribe or reservation. However, rural and reservation based data appear to be quite different than data collected from urban AIs. Therefore, it is imperative that research with urban AIs be conducted.

Urban Based Research

Those without theoretical frameworks. The literature search yielded six studies that focused on urban AI adolescents. Of those studies, two used a theoretical framework and four did not. Similar to previous sections, similarities between the studies' results were difficult to find based upon the variety of research approaches used and the research questions asked in each study.

Garwick, Rhodes, Peterson-Hickey, and Hellerstedt (2008) conducted community-based participatory action research, conducting focus groups with AI youth, ages 13-18 years old who had never been involved in a pregnancy (N = 148). Their qualitative research found that AI youth saw barriers to accessing pregnancy prevention education and contraception and wanted more community involvement in sex education programs. The study, although not guided by a theoretical framework, served the purpose of determining what pregnancy prevention efforts were relevant to the community and provided direction for future research by highlighting areas where interventions could be targeted (e.g., focusing on community prevention efforts and reducing barriers to contraception and sex education). In this case, the lack of a theoretical framework was not inconsistent with a qualitative approach. The researchers can now take their information and connect a theoretical framework or model to the findings. Future research can develop based upon the results of the focus groups and focus on questions or hypotheses based upon an appropriate model theory.

Rutman, Park, Castor, Taulii, and Forquera (2008) utilized the Youth Risk Behavior Survey (YRBS) data from 1997 to 2003 and compared results for the urban AI/AN population and the White dominant population. Participants

were enrolled in grades nine through twelve in a metropolitan area (N = 513). In a comparison of all risk behaviors in the survey, Rutman et al. concluded that urban AI/AN were at a twofold increased risk for sexual risk behavior as well as for violence at school, drug use, rape, assault and pregnancy. They also found that urban AI/AN were at a threefold increased risk of suicide, feeling unsafe at school, and involvement in fights that required medical care. These findings illustrate not only sexual risk, but overall general health risks in the population. However, there were multiple limitations in this study. First, only a small number of AI/ANs were represented in the large dataset. Second, the YRBS questions have not been validated for AI/AN youth. Third, the YRBS relies upon self-reporting potentially leading to over-reporting or under-reporting of various behaviors. However, despite the limitations, the study still strongly illustrates the health risks associated with AI youth.

Gruber, DiClemente, and Anderson (1996) also used a standard survey, in this case the Minnesota School Survey, to determine AI adolescents' risk behavior as well as their risk compared to other racial groups. The Minnesota School Survey is a survey administered every three years to sixth, ninth, and twelfth graders in Minnesota. Questions related to activities, experiences, and behaviors are asked. Topics include substance use, physical activity, violence, school and family connections, health, and sexual activity (for those in ninth and twelfth grade). Adolescents enrolled in either ninth or twelfth grade within the state of Minnesota were eligible to participate (N = 6159). The purpose of the study was to gain a better understanding of AI adolescent risk behavior outside

the reservation environment as well as compare AI risk behavior to other ethnic groups. Gruber et al. found that urban-based AIs were more likely to engage in risk behavior, including substance use, physical violence, and early initiation of sexual behavior, compared to their Black, White and reservation based AI counterparts. However, the study was limited due to the fact that less than 10% of the sample used identified as AI, those who did identify as AI were primarily Chippaqua Indian, and the geographic distribution of participants was unclear. Yet, given the limitations, it is still clear that sexual risk behavior is an important health risk to consider.

In contrast to the varied findings across a number of the studies reviewed, Gruber et al. (1996) and Rutman et al. (2008) reported similar outcomes. Both concluded that AI history, stress from acculturation, and socioeconomic status were all possible determinants in the poor health outcomes and risk behaviors in urban AI adolescents. Gruber et al. and Rutman et al. also concluded that sexual risk behavior, violence, suicide, and substance use were all common themes in the daily lives of urban AI youth.

Finally, Aguilera and Plasencia (2005) utilized a model of sacred elements including water, air, fire and earth. Although these elements comprised the model that the Native American Health Center's Family and Child Guidance Center (FCGC) used, the overall framework was unclear and therefore this study was placed into the area of the literature review of urban AI studies lacking a theoretical framework. The model used by Aguilera and Plasencia lacked direction, relationships among elements, relationships within the population, and

information on how the elements were arranged. The Youth Service Center that operates within the larger FCGC was summarized and discussed in relationship to youth outcomes. The researchers found that culturally relevant HIV/AIDS and substance abuse prevention programs were useful in the urban Oakland, California setting. The participants in their community-based youth programs reported increased connectedness to AI culture, more knowledge on HIV/AIDS, increased ability to refuse drugs, and reported better communication skills after attending the various programs offered at the community center. However, the sample size (N = 200) for all programs and response rate to questionnaires was quite small (N =23), the program was not fully explained, and there was no descriptions of the measurement tools or psychometric properties used to measure each construct.

While the previously mentioned research is important for understanding the AI adolescent in terms of risk behaviors and particularly sexual risk, there is no cohesive theme or recommendation that arises from the reviewed studies. In addition, the lack of theoretical models for the research makes it difficult to ascertain what the next step in the research process should be. A grounded theory is appropriate to help bridge the gap and guide future research. The fact that researchers are continuing to produce research uninformed by a theoretical framework or conceptual model brings forth questions of the validity of their findings and the foundation for their research and reinforces the need for development of relevant theories.

Those with theoretical frameworks. Only two of the articles specific to urban AI adolescents used a theoretical framework. Hellerstedt, Peterson-Hickey, Rhodes, and Garwick (2006) used the theory of triadic influences to select variables for analyses. The researchers, like Gruber et al. (1996), used the data from the Minnesota School Survey (N =4135). However, the researchers included data from sixth, ninth, and twelfth graders in their analysis. Hellerstedt et al. determined that young urban AI girls who were connected to their school and/or lived with a father were less likely to have sex. However, the presence of a father was not associated with sexual behavior in older girls. For all groups, exposure to violence, perpetuation of violence and substance use were all positively correlated with urban AI adolescent sexual experience, with exposure to violence being the most significant. Limitations included the possible underestimation of behaviors due to the exclusion of 642 surveys for incomplete data. Subsequently, those students who were excluded were more likely to report binge drinking, illicit drugs, and were less likely to want to go to college.

Marsiglia, Nieri, and Stiffman (2006), using Bogenschneider's Ecological Risk/Protective Theory examined individual factors and contextual family factors among urban American Indian youth living in the southwest United States (N = 89, mean age = 16.2). The researchers conducted a cross sectional analysis of the first wave of the urban AI Multisector Help Inquiry (AIM-HI). The survey used various tools to measure family relations, family communication, individual cultural involvement, family cultural involvement, and substance use. Marsiglia et al. determined that family communication was significant to sexual risk and

found higher levels of condom use among AI adolescents. The researchers also found higher than average levels of substance use in urban AI adolescents. Marsiglia et al. urged caution in drawing conclusions from these findings and recommended that future research focus on the population and expand the body of research currently available.

The two urban-based articles that utilized a theoretical framework had clear objectives and variable selection. It was clear where the authors intended to go with their current and future research as well as gave other researchers the opportunity to use similar guiding principles in their research. Yet, even with the use of a theoretical framework, Stubben (2001) argued that AIs are not just different racially, but also politically and this can affect the research perspective. The fact that many AIs are dual citizens between their tribe and the United States make the context they operate within uniquely different than other minority groups in the United States and adds to the need for a culturally specific theory for research.

Comparison of Groups: Using an Ecological Model

The following section will discuss the health disparities of the AI population in relation to other populations in the United States. Many of the articles within this section were mentioned in the previous section related to theoretical models. Currently, there is little literature available related to American Indian adolescents from an ecological perspective. Therefore, this section of the literature review will utilize literature on other, more researched adolescent girl populations as comparison groups to provide context. An adapted ecological model

(Bronfenbrenner, 1977) will guide the second literature review. Using the microsystem (individual psychosocial processes), mesosystem (family, peer, neighborhood, and school context), and two macrosystems (tribe and national policy), the literature will be reviewed in the context of what is known about the AI adolescent girl population in general, and specifically on sexual risk behavior. In order to organize the literature review in an understandable manner, this section will first introduce the microsystem and work outwards through Bronfenbrenner's ecological model. Because the literature on AI adolescent girls is limited, the predominant adolescent girl literature will be presented first with available AI research following, in order to provide a context for understanding adolescent sexual risk behavior and identifying sensitizing concepts and limitations.

Adolescent Psychosocial Processes (Microsystem)

Adolescent psychosocial processes include the adolescent's attitude and values towards sexual risk behavior including initiation of sexual activity and contraception choices. This section will focus on the lack of long-term planning related to sexual risk behavior among adolescent girls as one of the key psychosocial processes that is least understood or researched. Consistent with Gilligan (1982) and Erickson's (1968) theories of development, adolescent girls are trying to determine who they are, how they relate to others, navigate relationships, establish an identity, and develop a sense of independence. Thus, as adolescents try to fit in to their environment, they often make decisions without regard to future goals and orientation or without concern for negative consequences. It is important for adolescents to feel that they are similar to

others and thus decisions are often made to fit in rather than thoughtful consideration of potential outcomes. Adolescents need motivation, not just knowledge of risks in order to make healthy choices (Bandura, Barbaranelli, Caprara & Pastorelli, 2001; Bandura, Caprara, Barbaranelli, Pastorelli & Regalia, 2001). Therefore, adolescents often lack resistive efficacy, that is, the ability to resist “situational pressures and powerful immediate rewards” (Mitchell et al., 2005, p. 162).

Spear (2004) found that many young women did not consider their future when making decisions about sexual behavior. In fact, little deliberation or thought went into the adolescent’s decision to have sex. Spear reported that young girls were often knowledgeable about the availability of contraceptives and how they could prevent pregnancy. However, the young girls described being indifferent to contraceptive use and often assumed that their partner would be responsible. Since education about contraception and pregnancy prevention has not been consistently effective in deterring adolescents from engaging in sexual risk behavior, it is important to understand why adolescents engage in sexual risk behavior and what they view as reasons to forgo sexual risk behavior.

Research with adolescent girls who used contraception and those who do not provides valuable information on how adolescents perceive risk. Adolescent girls who did not use contraception, weighed the benefits of having a male partner’s love versus the risks of STIs and pregnancy in a study by Bralock and Koniak-Griffin (2009). For many, having the love of their partner was more important than the potential consequences. Condom use varied depending on

the comfort of the relationship and communication between partners (Grossman et al., 2008). Those who did not use condoms had fewer discussions with their partners about condom use, perceived condoms as disadvantageous, and were less likely to perceive advantages to condom use.

Adolescent girls who used contraceptives were less likely than their counterparts to use condoms to prevent STIs (Roye & Seal, 2001). A majority of the girls stated that they did not fully protect themselves from the risk of infections because they were in a long term relationship with their boyfriends and did not perceive a risk of infection (Roye & Seal). However, many stated they would be more likely to use condoms if they perceived a greater risk of infection and had better access to condoms (Roye & Seal).

American Indian adolescent psychosocial processes. Knowledge of the AI adolescents' attitudes and values related to sexual risk behavior is necessary to understand how individuals view early pregnancy and STIs in order to develop culturally appropriate interventions to reduce sexual risk behavior. Rutman, Park, Castor, Taulii, and Forquera (2008) argue that urban AI adolescents are increasingly at risk for health disparities because of the "poverty, unemployment, disability, and inadequate education at rates far above those of other Americans" (p. S80). However, little research is available regarding the AI adolescent's psychosocial processes particularly related to attitudes and values towards sex and early childbearing. In fact, only two studies were found that specifically addressed

Montgomery-Anderson (2004) contended that Native adolescents in Alaska and Greenland share similar values regarding childbearing. Education and pregnancy are valued by Native people in both the United States and Greenland. However, despite the cultural value of having a child, adolescent mothers, fathers, and parents of pregnant adolescents often raise concerns in both countries about the challenges early childbearing presents for young people (Montgomery-Anderson). This cycle of early childbearing is difficult to interrupt due in part to a lack of Native role models for adolescents who have avoided pregnancy and continued their education. Therefore, many adolescents in Native communities interpret pregnancy as an alternative route to achieve higher status within the tribal society.

Montgomery-Anderson's work focused on those Native adolescents living on reservations or in communities that were culturally homogenous. Therefore, it is unclear how these values and attitudes towards early childbearing factor into young urban American Indian girls. The values and attitudes towards sexual risk behavior must be further explored to understand the factors young women consider (or do not consider) when having sex.

Similarly, Garwick, Rhodes, Peterson-Hickey, and Hellerstedt (2008) examined the beliefs about early childbearing and sexual risk behavior among urban AI adolescents. The researchers conducted a qualitative study with AI girls who had never been pregnant. They explored motivations among those girls who were never pregnant as well as elicited recommendations on ways to prevent pregnancy in urban-based AI adolescent girls. The researchers

concluded that AI teens perceived a lack of access to pregnancy prevention information, community based resources, and contraception. The adolescents also expressed a desire for more community involvement, including school-based program and community member participation (particularly from community elders). The participants in this study reported never experiencing a pregnancy, therefore, their motivation to not become pregnant could be strikingly different than the motivation of those who had experienced a pregnancy and have hindsight to guide recommendations.

Horn (1983) concluded that many AI women believed that within their culture, motherhood validated a feminine role and helped create an identity for young women. However, even though child bearing was often respected, Horn found that AI adolescents who have children young often struggle to find support from their family and peers. Similarly, Kaufman et al. (2007) found that some Northern Plains tribes believed that having a baby young was a part of the culture, although they admitted that it often did slow academic progress and limit economic progression. The researchers concluded that increased use of substances contributed to sexual risk behavior, risk increased in the late teenage years and early 20's, and culture can both positively and negatively influence sexual risk behavior. Even with these findings, insight into why adolescents engage in sexual risk behaviors, how they determine when to have sex, with whom, and when to use contraception need to be addressed.

Family, Friend, Neighborhood, and School Context (Mesosystem)

Family has been shown to be a primary influence in an adolescent's life. The family's attitude towards sexual risk behavior, involvement in the adolescent's life and the family's education level and socioeconomic status can influence the adolescent's individual risk behavior. Significant research has been conducted on the influence of the family on modifying risk factors in adolescents. A large literature review revealed a relationship between positive family and peer support and lower risk behaviors among adolescent girls (DeVore & Ginsburg, 2005; Heinrich, Brookmeyer, Shrier, & Shahar, 2006; Ream & Savin-Williams, 2005; Tuttle, Landau, Stanton, King, & Frodi, 2004; Wills, Resko, Ainette, & Mendoza, 2004). In multiple studies, those adolescents who had positive family role models, had open lines of communication with their parents or guardians, and received support from their families were less likely to engage in sexual risk behaviors. Similarly, many have argued that relationships and bonds among family members and adolescents can significantly influence adolescents and their decisions related to sexual behavior (Fisher & Feldman, 1998; Heinrich et al., 2006; Jaccard, Blanton, & Dodge, 2005; Resnick et al., 1997; Saftner, Martyn, & Lori, 2011). Devore and Ginsburg (2005) concluded:

Recent scholarship demonstrates the significant, enduring and protective influence of positive parenting practices on adolescent development. In particular, parental monitoring, open parent-child communication, supervision, and high quality of the parent-child relationship deter involvement in high risk behavior. (p. 460)

Parent-adolescent communication has been shown to be a fundamental way to reduce sexual risk behavior in adolescents. Communication between parents and adolescents can delay sexual activity and encourage safe sex practices (DiClemente et al., 2001; Hutchinson, 2002; Hutchinson, Jemmott, Jemmott, Braverman, & Fong, 2003; Jaccard, Dittus, Gordon, 2000; Jaccard, Dodge, Dittus, 2002; Jackson, Bijstra, Oostra, & Bosma, 1998; Miller, Kotchick, Dorsey, Forehand, & Ham, 1998). In urban populations, parental communication and sexual risk behaviors has shown to have an inverse relationship, emphasizing the importance of family in modifying sexual risk behavior in adolescents (McIntosh, Moore, & Elci, 2009).

Friend and peer influence has similarly been considered a factor in adolescent risk behavior. Prinstein, Boergers, and Spirito (2001) found peer influence greatly affected health risk behaviors. Bryant and Zimmerman (2002) concluded that friends can affect an adolescent's decision to engage or not engage in risk behaviors. Similarly, Heinrich et al. (2006) determined supportive friend and parental relationships were predictive for lower sexual risk among adolescents. Similarly, friend perception of condom use, sexual risk, and pregnancy have all been found to influence behavior in adolescents (Brown, DiClemente & Park, 1992; Gillmore, Lewis, Lohr, Spencer, & White, 1997; Kotchick, Shaffer, Forehand, & Miller, 2001; Romer et al., 1994; Stanton et al., 1994). Subsequently, adolescents who were sexually active were more likely to be in friendship groups with others who were sexually active (Kotchick, Shaffer, Forehand, & Miller, 2001; Miller, Forehand, & Kotchick, 2000; Romer et al.).

Those who were not sexually active were more likely to have fewer than 50% of their friends engaging in sexual activity.

Although friend and peer influence has been shown in large studies to significantly influence sexual behavior (Cavanaugh, 2004; Heinrich et al., 2006; Jaccard et al., 2005), there is also evidence that friend influence alone is not substantial in adolescent risk behavior (Jaccard et al.). Therefore, since there is not a clear consensus on the role of friend influence, it is imperative to further explore the topic to determine how American Indians view friendship groups and influence.

Adolescents do not live in an enclosed setting. Therefore, although family and friends must be considered, it is also imperative to understand their environment outside of social networks. The neighborhood environment has previously been shown to influence young women and their decisions regarding sexual behavior. Duncan, Duncan, Okut, Strycker, and Hix-Small (2003) found that neighborhood collective efficacy, or regulation by neighborhood members to achieve common good, could delay sexual initiation. Similarly, Browning, Burrington, Leventhal, and Brooks-Gunn (2008) also found that collective efficacy impacted sexual behavior by having an effect on the number of lifetime sexual partners.

Neighborhood can also be reflected through a careful analysis of socioeconomic factors. Baumer and South (2001) found that economic status and environment can impact sexual behaviors with those who are more economically advantaged citing fewer risk behaviors. Chen, Thompson, and

Morrison-Beedy (2010) found that neighborhood predicted cumulative sexual risk index, but did not seem to impact number of partners or levels of sexual risk behavior. Cubbin, Santelli, Bridis, and Braveman (2005) found that adolescent girls living in areas where there were higher numbers of black residents or people who were idle (e.g. unemployed, not in school) were more likely to initiate sexual activity and less likely to use contraception. However, neighborhood influence has been shown to have a more dramatic effect on male behavior based upon the theory that “girls are less sensitive to the environment outside the family even under the same amount of monitoring or supervision” (Kim, 2010, p. 647). It is important to understand the environment that youth live in to understand the obstacles urban youth must navigate and their perception of normative behavior.

Although neighborhood is one way to understand the adolescent’s environment, there are also other environmental influences. Most adolescents attend school regularly. In fact, in previous studies school emerged as an influence on sexual risk behavior. Resnick et al. (1997) found that those adolescents who attended school regularly, felt connected to their school, or attended a parochial school were less likely to initiate sexual activity. Chen et al. (2010) found a relationship between grade point average (GPA) and nonromantic sexual partners. Those with higher GPAs were likely to have fewer nonromantic sexual partners than those with lower GPAs. Similarly, Corcoran (2000) found that adolescents who reported satisfaction with their school and school environment were more likely abstain from sexual risk behavior. To understand

urban youth's mesosystem, it is imperative to look at all potential influences and factors that could impact adolescent sexual behavior.

American Indian family, peer, neighborhood, and school context. In the AI community, there are limited studies focused on adolescent sexual risk behavior and even fewer discussing mesosystem dynamics related to sexual risk behavior. In fact, for this literature review peer influence, neighborhood, and school data was not available for American Indians. However, there was some research concerning American Indian families. Chewning et al. (2001) found that AI adolescents who perceived high levels of parental support and had higher perceived parental knowledge and monitoring of the adolescent's activities and friends were less likely to engage in sexual risk behavior. That is, the adolescents were more likely to abstain from intercourse or use consistent birth control methods. Conversely, Hellerstedt et al. (2006) found that although AI youth in their study did report family connectedness and the ability to openly communicate with parents about their problems, the outcome of sexual behavior did not significantly change.

Subsequently, Kaufman et al. (2007) found that adolescent AI girls with mothers who delayed childbirth, graduated with an advanced degree, or were in a long-term marriage were more likely to delay sexual activity. This particular study was conducted with Northern Plains reservation based AI adolescents. Therefore, the generalizability to the urban population is limited. Yet, the influence of mothers in their daughter's life has been shown in other minority populations (Kao, Loveland-Cherry, & Guthrie, 2010).

However, Oman et al. (2006) determined that the family dynamics in AI families are often different than mainstream American families. In their study, the role of extended family and elders created a different dynamic for AI adolescents in Oklahoma. Adolescents who identified themselves as AI and lived in Oklahoma were more likely to establish relationships with adults other than parents based upon their cultural values of clan, tribe, and collective child rearing. Collectivism is an important part of the cultural traditions within the community and this collectivism can positively impact adolescents in the urban AI community (Oman et al.).

Similarly, Red Horse, Lewis, Feit, and Decker (1978) argued that urban American Indian families are unique in structure and behavior. The researchers asserted that “American Indian family networks, however, are structurally open and assume a village-type characteristic” (p. 68). Red Horse et al. argued that AIs are rooted in the family, both immediate and extended, and rely upon this network as their primary means of support. They also concluded that a family network hierarchy is common with familial elders offering “official and symbolic leadership in family communities” (Red Horse et al., p. 69).

However, even though we know that AI families are unique, it is unclear how this unique family structure affects (or does not affect) sexual risk behavior. Understanding what AI adolescents learn from their family, the importance of extended family and tribal elders in the urban AI community, and the significance between family and community related to sexual risk behavior is necessary. More data are needed to understand why adolescent AI girls are making the

choices they make and whether the information on family dynamics gathered from reservation based AIs and those in other urban areas is pertinent to those AIs living in urban areas.

American Indian tribal, cultural, and historical context (Macrosystem)

Although the phrase “American Indian” encompasses all indigenous people, AI tribes are nations within a nation. Tribes establish their own governments, economic systems, and social services for tribal members. However, federally recognized tribes receive some services and funding from treaty agreements with the United States government. This dichotomy between autonomy from the US government and dependence on the government for various funding makes the struggles of the AI community more problematic.

Urban AIs have been continually overlooked in healthcare research. In Michigan, AI adolescent populations as a group have been largely ignored. The Michigan State Advisors on Adolescent Sexual (SAASH) project (2007) neglected the AI adolescent population, focusing their data collection and analysis on White, African-American, and Hispanic youth. Within Michigan there are 12 federally recognized tribes and 4 non-federally recognized tribes. Michigan has the 9th largest American Indian population in the United States. Within Michigan, American Indians have a median income of \$30,784, which is \$10,000 less than the national median income. Almost 26% of AIs in Michigan live in poverty. Thirty three percent of AIs who live in Michigan live in urban Detroit and those AI people are serviced by an IHS facility that provides care to people representing 155 tribes (Tribal Health Summit, 2008). Adolescent AI girls

living in urban areas like Detroit must deal not only with their unique cultural needs but also with the challenges that young people face in urban populations (access to health care, living conditions, crime and poverty).

Research with urban-based adolescent AI girls' sexual risk behavior is minimal. Most research on the AI population has focused on large reservation based tribes in the Northern Plains, western Midwestern states, and Southwest US. However, ignoring urban AIs leaves the majority of the population unaccounted for in health care research. Future research resulting from this grounded theory project will focus on finding commonalities and differences among urban dwelling AIs as well as ensuring that interventions created are culturally appropriate for the unique needs of urban adolescent AI girls.

National policy context (Macrosystem)

Adolescent pregnancy and STIs have an enormous impact on adolescent health and long term life success. Seventy percent of young mothers drop out of high school and only 30% of adolescent mothers complete high school by the time they are 30 years old (National Association of State Boards of Education, 2000). Simultaneously, young children who were born to adolescent mothers that are unmarried and did not finish high school are nine times more likely to live in poverty compared to children whose mothers were not adolescents, married, and finished high school (NCPTUP, 2005). Pregnant adolescents have higher rates of preeclampsia and STIs during pregnancy (Galves-Myles & Myles, 2005). STIs in pregnancy increase the risk of preterm labor, premature rupture of the membranes, and uterine infection. STIs can also cause infant blindness, sepsis,

liver disease, neurological damage, low birth weight, deafness, and mild to severe eye infections (Kaiser & Hays, 2005).

According to the Michigan SAASH (2007) it is estimated that Michigan taxpayers alone contribute \$302 million annually to fund public costs associated with adolescent childbearing, which includes lost tax revenue, health care, and child welfare costs. The younger the adolescent, the more money the taxpayer will contribute to support public costs of early childbearing. Early childbearing affects not only the education status of the adolescent, but also the adolescent's long term productivity and contribution to society. It also affects the health of their children.

Sexually transmitted infections are also serious issues among adolescents. Gonorrhea and chlamydia infections are often asymptomatic in both men and women. In fact, in a Michigan survey 58% of adolescent girls who tested positive for gonorrhea or chlamydia exhibited no symptoms prior to the diagnosis (SAASH, 2007). Untreated STIs can lead to infertility, a long term health problem for both women and men. Although the cost of STI treatment in adolescents is not readily available, the cost of treatment alone (including provider visits and medications for treatment) could be substantial for taxpayers nationwide.

National American Indian policy context

American Indians have “unequal access to health care, a low standard of living, high unemployment rates, substandard housing, and a high prevalence of communicable diseases, which has been complicated by the high precedence of

risk behaviors among community members” (Montgomery-Anderson, 2004, p. 276). However, despite this disadvantage, adolescent AIs are studied less than their African American, White, and Hispanic counterparts. The Centers for Disease Control 2009 National Youth Risk Behavior Survey does not provide American Indian risk behavior results separately as they do for Whites, Blacks, and Hispanic students. In the 1990’s the National Longitudinal Study of Adolescent Health (Add Health) began data collection waves. The Add Health data did not sufficiently sample AI adolescents to allow a separate analysis (Chewning et al., 2001.) This large scale, federally funded project overlooked a population that suffers from various negative health outcomes, including a high rate of adolescent pregnancy and STIs.

Economic status and access to health care can impact risk behavior. AIs are two times more likely to live below the poverty line than their White counterparts and have the highest level of poverty among all races in the United States (US Bureau of the Census, 2005). Although many AIs (the majority being reservation based) receive their health care and education through federal programs such as the Indian Health Service (IHS), the care they receive often does not address primary care needs or is provided by those unfamiliar with the AI culture and their unique requirements. Simultaneously, urban based AIs often do not have access to IHS facilities or funds available to reservation based tribal members. Therefore, the complexity and differences of the AI population makes this research even more important.

Nationwide, AI adolescent girls experience pregnancy at higher rates than the national average and also contract gonorrhea and chlamydia at higher rates. The last IHS Indian Health Focus: Youth (1998-1999) Survey found that American Indians neonatal mortality rate was 9.3 deaths per 1,000 live births (IHS, 2001). At the time, this rate was 22% higher than all races in the US population, and 48% higher than the White population's neonatal mortality rate. The postneonatal mortality rate among AIs was 81% higher than all races in the US population and 86% greater than the White population. Simultaneously, AI girls as a population receive prenatal care less frequently and later than the average US population (68.5% in the AI population compared to 82.5% in the general US population) (IHS). The already high infant mortality rate in the population coupled with the increased rates of infant mortality among infants born to adolescent mothers as well as a higher risk of living in poverty makes the sexual risk behaviors among adolescent AI girls even more important to understand. This study will look at the basis for sexual risk behaviors in AI adolescent girls in order to develop interventions that can reduce the negative outcomes associated with adolescent pregnancy and STIs.

Summary

Currently there are many gaps in literature and theory related to sexual risk behavior of urban AI adolescent girls. Researchers across disciplines are focusing on a broad range of health disparities that are present within AI communities across the nation, including sexual risk behavior. The literature that is available on AI adolescent sexual risk behavior is often underdeveloped,

descriptive, and provides little direction for future research. In order to develop acceptable, culturally appropriate interventions, a theoretical framework must be developed that can guide future research and hypothesis testing.

It is clear from the literature review that there are many areas in which AI research can evolve. Early childbearing and cultural acceptability among reservation based AIs gives insight into why sexual risk behavior is not widely discouraged in the population (Horn, 1983; Kaufman et al., 2007; Montgomery-Anderson, 2004). There is currently recognition that early childbearing can slow academic progression and potentially limit economic viability (Kaufman et al., 2007; SAASH, 2007). Yet, childbearing in the population has increased over the last decade (CDC, 2011b). Similarly, STIs continue to increase relative to the general United States' population (CDC, 2010). Therefore, there is a clear need for further research to address these issues and focus on reduction of sexual risk behaviors among AI adolescents.

The mesosystem has also been briefly evaluated and the dynamic among family relationships, peer influence, the neighborhood, school and sexual risk behavior in AIs warrants further study (Red Horse et al., 1978; Chewing, 2001; Hellerstedt et al., 2006). The role of the tribe, historical ties and discrimination, and the role that national policy plays in allowing AI youths to seek timely, necessary care are essential to evaluate. Furthermore, the lack of a theoretical model that can encompass all these points, and others that have not been identified is clearly needed.

According to Fitzpatrick (2005), "... nursing conceptual models provide the overall direction for practice, education, and research" (p. 1). With this in mind, culturally appropriate frameworks must be developed and tested to ensure their compatibility for the AI adolescent population. Future conceptual models need to develop that do not presuppose violence or abuse but rather understand that those events can occur and shape outcomes.

In order to effectively guide research that can improve the health of the AI adolescent population, a grounded theory approach is needed to provide a theoretical framework that can be utilized in future research. This framework must be culturally relevant, account for the unique aspects of the urban AI, and encompass broad aspects ranging from the individual to the effect of national policy on the adolescent. The next chapter outlines the methods used for this grounded theory research study.

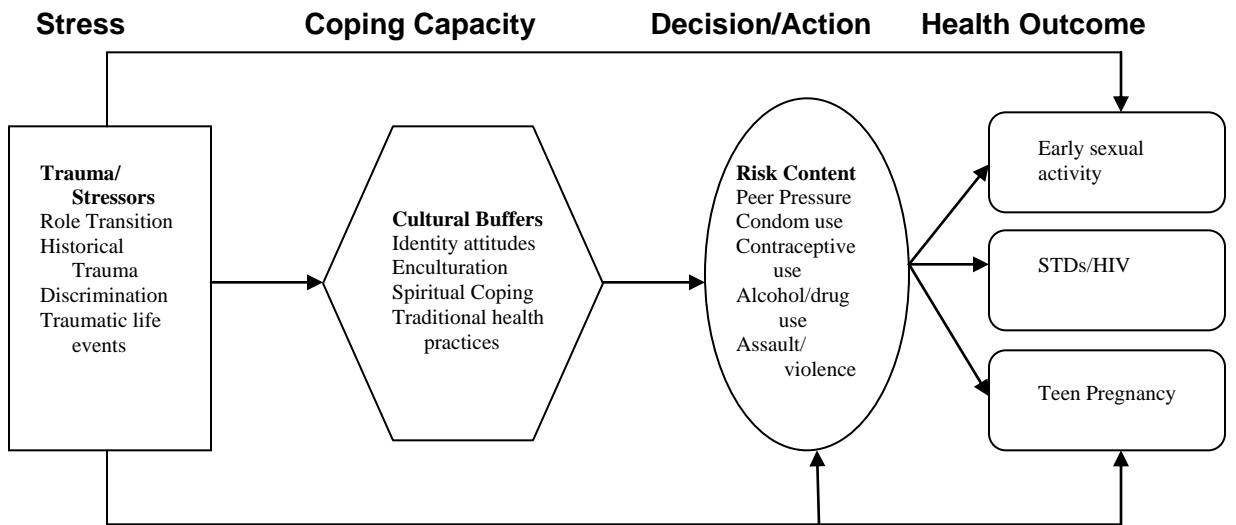


Figure 1. Conceptual framework of sexual health for American Indian youth.

(Kaufman et al., 2007)

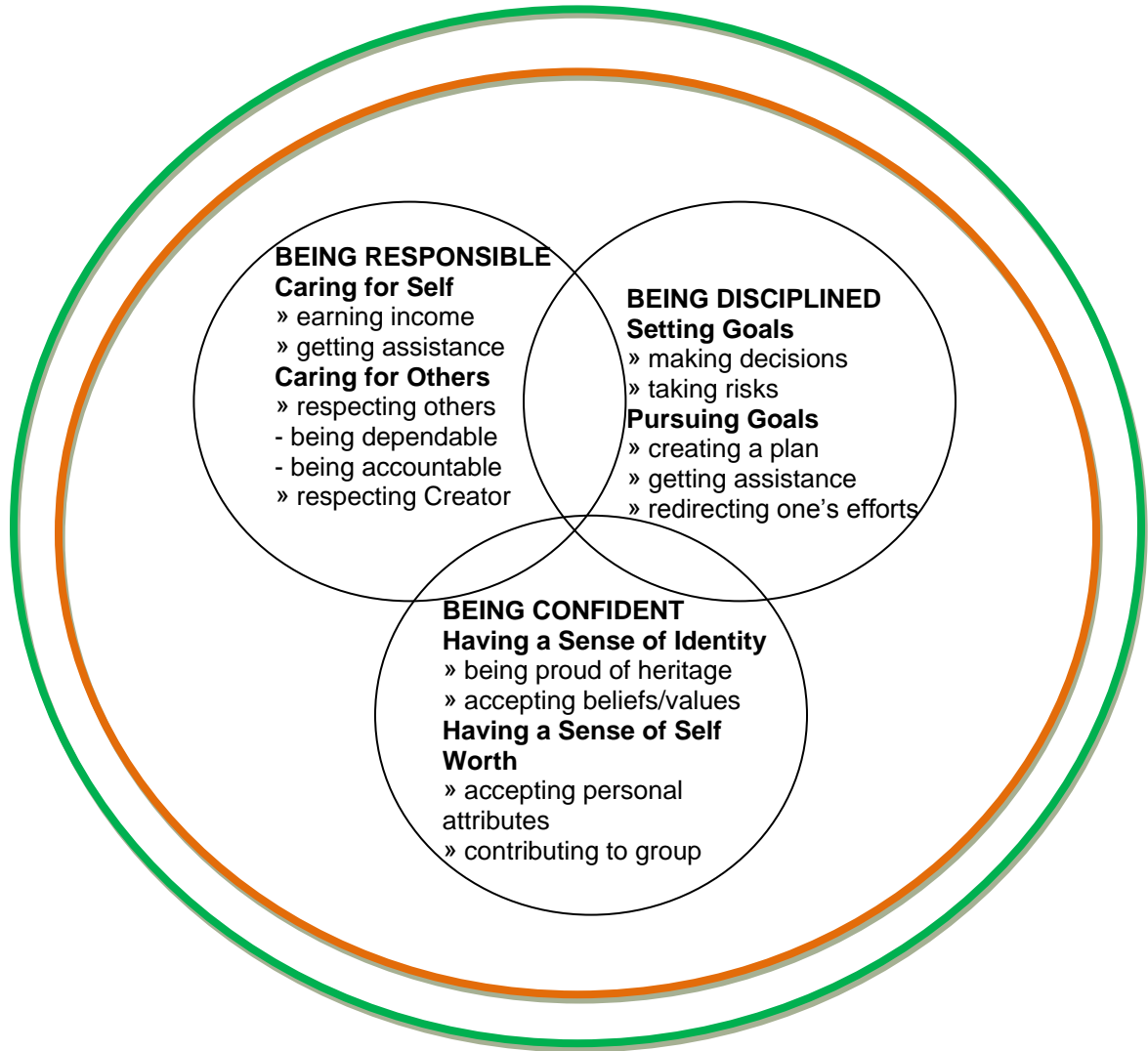


Figure 2. Cherokee Self-Reliance Model. “The model of Cherokee Self-Reliance is formed in a circle indicating the circular holistic worldview of Cherokee culture. The outside circle is green which symbolizes an oak wreath. The orange inner circle symbolizes the sacred eternal fire. The live oak, the traditional principal hardwood timber of the Cherokee people, was used to kindle the sacred fire. In connection with this fire, the oak was a symbol of strength and everlasting life. These colors are used in the seal of the Cherokee Nation. The three interlocking circles in the center of the model depict the interrelatedness, intertwining, and interlacing of all of the categories and subcategories of the cultural domain of Cherokee Self-Reliance” (Lowe, 2002, 291).

CHAPTER III

Methods

Little research is available on adolescent girl AIs and their perceptions of factors influencing sexual risk behavior. In addition, most of the AI sexual risk research that is available focuses on those living on reservations and there is even less focuses on the urban adolescent AI girl. In order to develop interventions to reduce sexual risk behavior in the adolescent AI population, there is a need for better understanding of the complex lives that urban adolescent AI girls lead and how they influence sexual risk behavior. It is necessary to understand the psychosocial processes and contextual factors that influence young AI girls' to have sex, have safe sex, or abstain from sex.

Qualitative research facilitates exploration and description of personal experience and meaning in specific contexts (Creswell, 2003). Glaser's (1978) grounded theory method was used to explore the psychosocial processes and contextual factors related to sexual risk behavior of American Indian adolescent girls. The generated theoretical model will inform future studies focused on the reduction of sexual risk behaviors in the urban AI adolescent girl population.

According to Lincoln and Guba (1985), grounded theory research is important for formulating understanding of local scenarios that would go unexplained and implicit if not researched. Stern (1980) supports rigorous use of grounded theory research method to promote the discovery of accurate and

useful analyses of social processes relevant to nursing science. Symbolic interactionism (SI) (Blumer, 1969; Mead, 1934) and an adapted version of Bronfenbrenner's (1977) ecological model guided the conduct of the research; design, data collection and data analysis to ensure that both psychosocial processes and context of the adolescent's life were addressed. Event history calendars were used to obtain data on the context of the adolescent's life and provide valuable information regarding past history and future goals.

Design

The grounded theory method was developed by Glaser and Strauss (1967) based upon the theory of SI. Grounded theory is an inductive method that "is the systematic generation of theory from systematic research. It is a set of rigorous research procedures leading to the emergence of conceptual categories" (Grounded Theory Institute, 2008, para. 1). Stern (1980) argued that grounded theory method is uniquely different from other qualitative methods based upon the following rationale: 1) the resulting conceptual framework is gained from the analysis of the data; 2) the individual and their social context is the primary focus of the study; 3) the data are constantly compared with other data throughout the process; 4) data collection is driven by the developing theory and thus questions can be changed as the process evolves; and 5) from the beginning, data are analyzed and serves as a basis for the preparation of research reports. Therefore, grounded theory requires the researcher to work within a matrix rather than linearly (Stern).

According to Glaser and Strauss (1967), there is a five-step method for grounded theory research: 1) collection of data; 2) identification of the concept; 3) development of the concept; 4) modification and integration of the concept; and 5) writing the research report. Consequently, Glaser (1998) maintained that the four criteria necessary for judging and doing grounded theory are fit, workability, relevance, and modifiability. The ultimate goal of grounded theory method is to develop a theoretical model that is reflective of the relevant individual patterns of behavior.

Symbolic interactionism. George Herbert Mead (1934) and Herbert Blumer (1969) are most closely associated with SI. Mead and Blumer place great emphasis on the importance of meaning and interpretation as essential human processes that react against behaviorism and mechanical stimulus-response psychology. SI focuses on social interaction occurring within the context of society. Sexual decisions made by the adolescent are shaped by interaction with society and these decisions, in turn, shape society. The three premises of SI as defined by Blumer are: 1) "Human beings act toward things on the basis of the meanings that the things have for them;" 2) "The meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows;" 3) "These meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters" (p. 2). These premises can be applied to the societal interaction influence affecting AI girl adolescent sexual risk behavior. Using SI in this research will facilitate understanding the psychosocial processes of the AI adolescent girl by

guiding the conduct of the interviews and talking circles and the data analysis focused on the individual psychosocial processes.

Ecological model. Context is necessary to consider in grounded theory work. Egan (2002) argued “the researcher must begin with an awareness of the context of the research by considering such factors as cultural, social, organizational, and interpersonal influences” (p. 282). This context must be viewed from the lens of those participating in the grounded theory study rather than through the investigator’s lens (Egan). In order to organize SI in a societal context, an adaptation of Bronfenbrenner’s (1977) ecological model for the American Indian adolescents and their environment will be utilized. Social interaction and the individual’s cultural contextual view of society are necessary for understanding the broad processes affecting AI adolescent girls.

Bronfenbrenner (1977) developed a model of infant and maternal attachment that has been extensively used/adapted for use with other populations. Bronfenbrenner developed a five system ecological model which includes the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Bronfenbrenner (1994) describes the microsystem as a “pattern of activities, social roles, and interpersonal relations experience by the developing person in a given face-to-face setting...” (p. 39). The microsystem would include the family, school, peer group, and work. The mesosystem “comprises the linkages and processes taking place between two or more settings...” (Bronfenbrenner, p. 40). The mesosystem would include the relationship between home and school or the relationships between home and

the workplace. The exosystem “comprises the linkages and processes taking place between two or more settings, at least one of which does not contain the developing person...” (Bronfenbrenner, p. 40). An example of an exosystem would be the relationship between the home and the parent’s workplace. The macrosystem is the “overarching pattern of micro-, meso-, and exosystems characteristics of a given culture or subculture...” (Bronfenbrenner, p. 40). The macrosystem would include a particular culture or ethnic identity. Finally, the chronosystem accounts for changes or stability over time in the individual and in the environment. These would include socioeconomic changes, moves, or work changes.

Bronfenbrenner (1994) identifies two propositions or assumptions critical to the model. These propositions help define the ecological model. The first proposition states:

...human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment. (Bronfenbrenner, p. 38)

His second proposition states:

...the form, power, content, and direction of the proximal processes effecting development vary systematically as a joint function of the characteristics of the developing person; of the environment---both immediate and more remote---in which the processes are taking place; and the nature of the developmental outcomes under consideration.

(Bronfenbrenner, p. 38)

Bronfenbrenner's ecological model was adapted to support the questions asked in the interviews. Each system indicates a different environment that the central figure, in this research the adolescent is exposed to. The microsystem, includes the adolescent's immediate surroundings (e.g. age, future orientation, risk perceptions). The mesosystem includes groups of microsystems (e.g. family influence, friend influence, socioeconomic status, school, and neighborhood). The exosystem is defined as an environment or setting that influences the adolescent but where they might not actively participate (e.g. their parent's worksite environment). Finally, the macrosystem encompasses culture and society that the individual is living within (e.g. tribal values, history, national policy towards health care). This culture and society might not be in accordance with their own beliefs but can influence their life. The adaptation of the model occurred by adapting the basic definitions of the model and adapting it to the American Indian adolescent based upon extensive literature reviews and consultation with AI colleagues and community members.

The use of Bronfenbrenner's framework facilitates exploration of the AI adolescent sexual risk behavior by examining the social contexts (including the influence of social structures and of the family, tribe, and national policy) that could facilitate understanding of the sexual risk behaviors and interactions of the AI population. This model established the general framework for the interview questions so that the resulting data could be analyzed with an understanding of the AI adolescents' social network.

According to Reifsnider, Gallagher and Forgione (2005), “Research directed at reducing health disparities needs to be based on a thorough understanding of how and where the disparities occur” (p. 221). They argued that ecological models are particularly helpful in analyzing the relationships and interactions between the individual, family, neighborhood, and community related to health disparities and health promotion. Ecological models have been successfully used to define multiple relationships in health research (Bronfenbrenner, 1977; Forgione, 2002; Reifsnider, 1998; Rubin, 1984) and provide a framework to exhibit the relationships among variables in the research. Bronfenbrenner’s ecological model used with SI allowed for in depth exploration of the factors affecting the adolescent as well as the meanings acquired from interactions with others. The two frameworks guided the initial stages of the research, including the development and conduct of the interviews and talking circles. They also guided the analysis of the event history calendars to ensure that each calendar is placed into context. They serve as a structure from which a grounded theory can emerge.

Event history calendars. The EHC is based upon previous life history calendar research with adolescents as well as themes that Martyn and colleagues derived qualitatively (Martyn, 2009). “When adolescents complete the EHC, they use step-by-step instructions, autobiographical memory cues, and retrieval cycles...” (Martyn, p. 70). Martyn and others (Martyn, Hutchinson, & Martin, 2002; Martyn) developed an EHC to assess adolescent risk behavior to analyze patterns of behavior over time and elicit information that would allow

open discussion regarding risk reduction and health promotion behaviors.

According to Martyn, “A retrospective data collection tool that is contextually and temporally linked and visually shows interrelationships and patterns of behavior and influences is ideal for adolescent risk behavior research ...” (p. 76).

An original adolescent EHC was designed by Martyn who found that the EHC “demonstrated good face validity” (Martyn & Martin, 2003, p. 215) and construct validity. Research on the EHC with both adolescent girls and health care providers indicated that it facilitated recall, report, and communication about risk behaviors (Martyn & Martin; Martyn, Reifsnider, Barry, Trevino, & Murray, 2006). The EHC allows the adolescent the opportunity to chronicle their life events over a three year period and reflect on the interaction between life events, relationships, living situation, sexual activity, and other risk behaviors. The EHC also provides a column for a fourth year so that adolescents can note future goals or plans (See Figure 3).

The EHC is designed as a grid with time units (columns) of years. For each year, the following adolescent data is recorded: the participant’s current age, grade in school, who they lived with, who they considered to be their support system, activities they participated in, positive events, negative events, sexual activity (including the number of partners, the duration of the relationship, the type of sex engaged in, and whether or not birth control was used), and any drug, alcohol, or tobacco use. The first three time unit columns included the current year, and the two previous years. The final column was intended for the future year. In this column, the adolescents were to write down what they

expected to occur and any goals they might have (e.g. go to college, get a 4.0, stay with their current boyfriend, etc.). The current study utilized the EHC to gain valuable historical contextual information from the adolescents that was not revealed in the talking circles or individual interviews.

Sample and Setting

Participants were primarily recruited from the American Indian Health and Family Services (AIHFS) center in Detroit, Michigan. However, the AIHFS had significant networks spanning across the entire southern area of Michigan. Therefore, participants were recruited across a geographic region spanning from Grand Rapids to Detroit. Michigan is one of only 11 states in the US to have a population of over 100,000 American Indians (U.S. Bureau of the Census, 2002). Of the AIs living in Michigan, one-third live in southeastern Michigan (Tribal Health Summit, 2008). In fact, according to national estimates, the majority of American Indians now live in urban areas as opposed to a rural or reservation setting.

The AIHFS is a community-based health center that has served the Detroit and surrounding American Indian community for 21 years. In addition to medical, dental, mental health, and substance abuse prevention and support, AIHFS also offers a wide array of social and preventative care services. The center provides culturally based activities for all ages. There are youth groups for adolescents as well as after school programs in tutoring and preventive education. The center is a lively facility that serves many adolescents and caters to AI traditions such as sweat lodges, powwows, and pottery classes.

Adolescent girls were eligible to participate in the study if they were: between 15-19 years of age, self-identified as American Indian, had parental permission to participate in the research study (if under the age of 18), and were able to speak, read, and write English. In order to maintain strict provider-client relationships, adolescent girls were excluded if they were patients of the researcher at the clinic. The age criterion for the adolescent girls (15-19 years) was selected to follow the age criteria used by the National Campaign to Prevent Teen and Unplanned Pregnancies as well as many of the Centers for Disease Control's groupings of adolescent ages.

According to Patton (2002), sample size in qualitative research can vary depending on what the researcher is attempting to explore, the purpose of the inquiry, and the available time and resources. Patton argued that although data collection and analysis will be the guiding force behind sample size, it is reasonable to estimate a minimum sample based upon the phenomenon of interest and the purpose of the study. After consideration of the AI population in the area, the number of AIs who used AIHFS services, the amount of time required to recruit participants, and the sensitivity of the subject matter, the sample size at the beginning of the study was set at 20 to 30 participants.

The number of participants was determined when data saturation was reached. Data saturation occurs when collected data yields no additional new information only redundancy of data that was previously collected. Likewise, Lincoln and Guba (1985) recommend data collection continue until redundancy is reached. In this study, data saturation occurred after 20 participants.

The PI, medical staff and community outreach staff at AIHFS recruited participants. Recruitment occurred in the AIHFS clinics, at AIHFS social events, at AIHFS adolescent youth groups, through the AI network across the state of Michigan and by word of mouth. In order to help facilitate recruitment, flyers were posted in the clinic areas and throughout the AIHFS facility, information about the research study was published in the agency email communications and newsletters, and referrals came from AIHFS staff and providers. In addition, the researcher attended multiple youth group sessions to recruit participants.

Adolescent girls between the ages of 15 and 19 years old were invited to participate in a study to discuss sexual risk behaviors. Eligibility for participation was verified by the PI for interested potential participants. Each participant received compensation of a \$30 gift card for completion of the initial talking circle or individual interview and a \$20 gift card for those completing the follow-up interviews. Recruitment continued until saturation was achieved (N=20).

Data Collection and Recording

Approval for this study was granted by the Health Sciences Institutional Review Board (IRB-Health) at the University of Michigan. As part of the IRB approval process, a certificate of confidentiality was obtained through the National Institute of Nursing Research. The data collection procedure for this study included collection of demographics, event history calendars, and talking circles or an individual interview data. Participants were asked if they would be willing to participate in a follow-up individual interview when consent was initially obtained and contact information (including phone number and email) were taken

at that time. Follow-up in-depth individual interviews were conducted with select participants to clarify and validate data collected in the initial interview or talking circle. Focus groups (in this case talking circles) and interviews have been a traditional source of information for grounded theory research.

Event history calendars. Prior to beginning the talking circle or individual interview, adolescents completed an EHC to give retrospective, potentially sensitive information regarding their family life, life events, peers, sexual history, and contraceptive use. Participants chose the location of the talking circles and individual interviews based upon convenience and preference, including transportation access, personal comfort, and desire for privacy. Each participant completed the EHCs in an area that allowed for individual privacy. The participants received the blank EHC as well as directions for completing the EHC. Event history calendars took approximately 10 to 30 minutes to complete by participants. Three of the twenty girls asked for additional assistance or instruction when completing the EHC. However, they were able to complete the EHC independently after the researcher provided clarification of instructions. The EHC data was analyzed simultaneously with the results of the talking circles and individual interviews.

Talking circles and individual interviews. Adolescent participants had the option to participate in a talking circle or an individual interview. Since sexual behavior and beliefs are sensitive topics, it was necessary to provide an opportunity for participants to disclose sensitive information in private. Twenty adolescent girls participated. Eleven of those chose to participate in individual

interviews and nine participated in talking circles. Consent and assent were obtained for all participants

Talking circles are a traditional method of group communication in American Indian society. This culturally appropriate method of conducting focus groups was successfully used in other American Indian research projects (Becker, Affonso, & Blue Horse Beard, 2006; Hodge, Fredericks, & Rodriguez, 1996; Picou, 2000; Strickland, 1999). Talking circles are familiar to American Indians as they historically rely on oral traditions to relay experiences. Other research studies involving adolescents at AIHFS successfully utilized talking circles.

The talking circles lasted approximately one to one and a half hours. The adolescent participants sat in a circle and responded to the questions presented by the PI. Two talking circles occurred at the AIHFS facility and one occurred at a public school in Warren, Michigan. Each room was private and had locks so that others could not intrude upon or interrupt the data collection process. All talking circles and individual interviews were audio recorded.

Prior to the talking circle, the PI explained the rules of the talking circle to participants including allowing each individual the opportunity to talk and each participant's ability to refuse to answer questions. The PI also briefed participants on the confidentiality of the subject matter and required the participants to sign a statement of confidentiality that outlined the rules of privacy that must be maintained during and after the talking circles. Parents of minors

were also required to sign a confidentiality statement stating that they understood they could not ask the participants about information discussed.

During the talking circle, everyone was given the opportunity to talk. On the rare occasion that the person did not want to answer a question, they passed to the next person in the circle. Unlike focus groups, the interaction between participants is not as important as allowing each member to share their personal experience on the topic. In talking circles, each person's voice is equal and each member has equal opportunity to address the question. An object is used during talking circles to show which person currently is given the right to share their story. In this study, a shell was passed from one participant to the next and the person with the shell was the person who had the floor to talk. Once the participant finished speaking, they passed the shell to the next person in the circle. Advantages of talking circles over individual interviews include the opportunity to discuss multiple topics with a variety of people in one setting, compare participants' responses during the process, and decrease the burden felt by participants during individual interviews (Krueger, 1994; Morgan, 1997).

Those adolescents who chose not to participate in a talking circle could choose an individual interview. Individual interviews occurred at the location of the participant's choice, with most taking place in the AIHFS building. Participants who chose the interview option did not sign the talking circle confidentiality agreements since their information was only being shared with the PI. However, all other study procedures were maintained. The PI moderated all talking circles and conducted all individual interviews.

Prior to the talking circles and individual interviews, the PI established a set of guidelines and training protocols with the assistance of her committee. The talking circles and individual interviews began with an explanation of the purpose for the study, including the high incidence of STIs and early childbearing among the American Indian adolescent population in the United States and their specific geographic region. The importance of participants sharing their perceptions on the topic was discussed and they were encouraged to discuss their perceptions of other adolescent' experiences (but were asked not to identify them by name).

During the talking circles and interview, participants were asked questions in nine topics that were developed in consultation with Drs. Martyn and Momper. Initially, 29 questions were asked of participants. However, due to the nature of grounded theory analysis, additional questions were added, altered, or deleted to clarify themes as they emerged in data analysis. By the end of data collection, 38 questions were posed to participants (See Appendix).

After the talking circle, individual interview, and EHC data was analyzed, individual, informal, semi-structured follow-up interviews were conducted with eight participants for member checking, clarification, and further exploration of data and for peer validation of the data analysis. Informed consent and assent for the individual follow-up interviews were obtained prior to beginning the interviews. Participants were selected for follow-up interviews from among those who expressed interest in further discussion of the topics with the PI or those whose ideas resonated with the themes that emerged.

During the follow up interviews, the PI asked questions about the five themes that emerged from the initial data collection. Participants were first asked if the themes were accurate and relevant to their own lives and the lives of other AI adolescent girls. Then, additional follow up questions were asked based upon their answers. Each interview was uniquely different based upon the responses of the participants. However, all the follow up interviews included questions about the influence of family, friends, the school and neighborhood, culture, and individual goals. In additions, those participating in the interviews were asked to draw a model of the influences in their lives and explain the model to the PI. Participants were told that they could draw any type of model using pictures, words, or shapes. They were instructed to draw a model that reflected what influenced them to have sex, safe sex, or abstain from sex. These models became part of the data and were used during data analysis.

Recording. Data from the talking circles, individual interviews, and follow up interviews consisted of transcripts of the audio-recorded sessions as well as debriefing notes and memos recorded by the PI. Transcription occurred within 96 hours of the session by an independent company located in New York with experience transcribing health science research data. No identifying information was used on the audio recordings to protect the identity and privacy of participants. A total of 478 pages of talking circle and individual interview data were coded and analyzed. In addition to the 478 pages, an additional 74 pages of memos from the PI and the American Indian research assistant supplemented the audio recorded transcripts.

Personal issues. In qualitative research, the researcher becomes a primary data collector; therefore, personal issues were identified prior to starting the research in order to identify personal beliefs and bias. This study was conducted by a White, girl researcher from a middle income background. Although the researcher is familiar with the American Indian population, she is not a member of the culture. The PI facilitated participation by the American Indian adolescents by finding commonalities in gender and conveying a non-judgmental interest in the lives and thoughts of the participants. The researcher simultaneously immersed herself in the AI community through work as a healthcare provider at AIHFS, an adult participant in youth groups, and through active participation in AI community events. However, grounded theory is an ideal method for research because “there has been an emphasis on setting aside preconceived notions prior to and during theory building” (Egan, 2002, p. 278).

For grounded theory research to be successful, the researcher must immerse herself into the world of the participant in order to better understand the culture she is studying. According to Krueger (1994) and others (Kline, Kline, & Oken, 1992), people are more likely to share personal information about themselves with people who are like them. The talking circles were relatively homogenous in nature with all participants self-identifying as AI adolescents although it was imperative to recognize the differences among tribal nations and people. During the duration of data collection and analysis, the PI had the support of the AIHFS community including the medical staff, administrative staff, youth support staff, and community members at large.

Ethical issues. Informed consent was obtained from participants who were 18 years and older. For those participants under age 18, consents was obtained from their parent or legal guardian and assent from the adolescent prior to initial data collection and follow-up individual interviews. The informed consent/assent contained the following information: purpose of collecting the information, intended use of the information, how the questions would be asked, how the responses would be handled (including confidentiality), the risks and/or benefits for the participant, and breaks in confidentiality. A certificate of confidentiality was obtained through the National Institutes of Nursing Research in order to further protect the participants and their personal information.

Confidentiality of the data and anonymity of participants was maintained throughout the research study. Participants were identified with a code number and were referred to by that number during the course of data collection. Within the talking circle groups, participants referred to others by their number as well. A study log was the only list with real name and numerical code. This log was secured in a locked file cabinet separate from the other data in a School of Nursing research office. Transcribed tapes, demographic information, EHCs and other data were stored in a secure location by the researcher.

Data Analysis

The constant comparative method of data analysis was used simultaneously with data collection. According to Glaser (1978), "grounded theory is a detailed grounding by systematically analyzing data sentence by sentence by constant comparison as it is coded until a theory results" (p. 16).

Further, Glaser (1992) stated that the basic social-psychological process (BSP), the central theme in the data, is first identified during the grounded theory method and upon its discovery an emerging theory is developed. As part of the BSP, basic social structural processes (BSSP) and basic social psychological processes can be identified (Reed & Runquist, 2007). Theoretical coding, memos, and data sorting assisted the researcher in data analysis.

Event history calendars. Initially, the event history calendars were analyzed for additional information not obtained in talking circles/interviews regarding the participants' life history and behaviors. Constant comparative method was utilized to determine specific characteristics of the population (Glaser & Strauss, 1967). The EHCs were examined immediately following each participant's interview or talking circle. Impressions regarding the adolescent's life history and behaviors were initially noted. Once data collection was complete, all the EHCs were laid out side by side in rows of four and analyzed once again individually and then as a group. The researcher noted similarities and differences as well as changes over time on memos (Cresswell, 2003). Specific counts were made of the type and of family living situations, goals, risk behaviors, negative events, and sexual behaviors. As a part of counting specific incidents, constant comparative method was used to determine patterns among individual participants and the larger group. These patterns were noted and became a part of the larger data analysis of talking circle/interview transcripts. The EHC data facilitated understanding of the participants' social context more closely.

Data coding. Constant comparative analysis was conducted on all data (e.g. EHCs, transcribed interview/talking circles, memos, follow-up model drawings) using three levels of increasingly theoretical coding. Open coding of the data (Level I) began data analysis. Level I coding involved line by line analysis of the transcribed data from the talking circles and individual interviews in order to identify the processes and contextual factors in the data (Glaser, 1978). During the research project, these processes/contextual factors or substantive codes were compared with other data, including the completed EHC data, and assigned to categories (Level II). Categories were then composed of coded data that appeared to form patterns or exhibit similar information. The categories were compared to other categories to ensure that they were mutually exclusive (Glaser).

After ensuring that each category was mutually exclusive, the categories were then reduced by comparing them to each other to determine how they fit in a higher order category. Reduction of the numerous categories occurred in order to identify the primary social processes or core variables that explained the social scene (Level III) (Glaser, 1978). Conceptualization of the relationship among the three levels of codes occurred through development of the more theoretical Level III codes (Glaser; Hutchinson, 1993). During the coding process, the BSP was identified and the emerging theory was further developed according to Glaser's grounded theory method.

Basis social process. According to Glaser (1978), "BSP's are theoretical reflections and summarizations of the patterned, systematic uniformity flows of

social life which people go through, and which can be conceptually ‘captured’ and further understood through the construction of BSP theories” (p. 100). The purpose of the BSP is to not only identify processes and problems, but to understand the changes of these processes over time (Reed & Runquist, 2007). Identifying the participant’s perspective on the main social processes, or core variables, as well as how those problems are managed is the priority of grounded theory method. The BSPs can be separated into two distinct categories: basic social psychological processes (BSPP) and basic social structural processes (BSSP).

A BSPP “refers to social psychological processes such as becoming, highlighting, personalizing, health optimizing, awe inspiring and so forth” (Glaser, 1978, p. 102). BSSP “refers to social structure in process---usually growth or deterioration---such as bureaucratization or debureaucratization, routinization, centralization or decentralization, organizational growth, admitting or recruiting procedures, succession, and so forth” (Glaser, p. 102). Both can be a part of the larger BSP. In fact, Glaser argued that the BSPP is most important for understanding behavior whereas the BSSP helps understand the relevant social structures. Glaser contended that researchers generally need a BSPP to understand the larger BSSP.

The basic social psychological process and basic social structural process were discovered through an organized, methodical process of examining the data using the constant comparative method and critical thinking. Level III coding allowed the researcher to identify the BSPs that “can account for change

over time with considerable ease of meaning, fit, and workability” (Glaser, p. 101). The emerging grounded theory was further expanded and developed through selective sampling of the literature and selective sampling of the data.

Selective sampling, or theoretical sampling, of the data allowed the researcher to advance the grounded theory. The emerging core variables were compared to the data to determine their relevance and necessity to the developing theory. Data and current literature was selectively sampled and simultaneously analyzed and incorporated into the developing theory. The literature was selected based upon its relevance to the core variables and its ability to expand the developing theory. Sampling continued until data saturation was reached and no new information was garnered from the data and literature. After reducing the data and simultaneous selective sampling of the data and literature, the theory emerged.

Theoretical coding, memoing and sorting. During the data analysis process, memos were used as a means for the researcher to collect additional personal, theoretical, methodological impressions, thoughts, and research ideas. Memos, according to Glaser (1978) “are that stage of generating theory which serve to connect the data and final analysis explicitly by conceptually raising the analytic formulation of the codes” (p. 84). Theoretical coding, memoing, and sorting allowed the PI to further integrate and modify concepts into the emerging grounded theory.

Abstraction was increased through the use of theoretical coding (using analytical schemes). Glaser’s (1978) coding families was utilized during data

analysis. Glaser's coding includes the six C's (causes, contexts, contingencies, consequences, covariances, and conditions), process, degree, dimension, type, strategy, interactive, identity-self, cutting point, means-goals, cultural, consensus, mainline, theoretical, elaboration, unit, reading, and model families. These coding families had some, if not considerable overlap since they were not mutually exclusive.

After initial coding was completed by the PI, an American Indian research assistant familiar with AIHFS and the Detroit urban community was hired to review the talking circle and interview data from an AI perspective. The research assistant has a bachelor's degree from the University of Michigan and was involved with health research data collection while an undergraduate student. The research assistant was considered a "traditional" American Indian man by his colleagues and peers at the AIHFS. In addition, because he was raised by women and was considered more traditional, his perspective can be seen as leaning towards feminist thought. The research assistant wrote memos for each transcript regarding his perspective on the themes that emerged in each talking circle and interview. The impressions from the research assistant were integrated with the other memos and used for further confirmation of codes and to determine if the PI was recognizing all themes, particularly those that might be more evident to someone within the culture.

In addition to the research assistant, the PI worked with two faculty members while collecting and analyzing data. The first faculty member, Dr. Sandra Momper, advised the PI on American Indian culture and research with

the population. Dr. Momper provided feedback about the data and an AI female perspective that would not be gained from the RA or the PI's review of the data. Dr. Kristy Martyn was the second faculty member who provided analysis support during the research process. Dr. Martyn, an expert in adolescent sexual risk behavior and grounded theory, provided colleague validation and functioned as a peer debriefing group for the PI. The impressions of Dr. Martyn and Dr. Momper were also integrated with the other memos and used for further confirmation of codes and to determine if the PI was recognizing all themes.

The developed codes were important for two reasons. The first was because they were necessary to help the researcher maintain a conceptual level in writing about the concepts and their relationships with one another. Second, they revealed how the substantive codes relate to one another as hypotheses that were integrated into the theory. Ultimately, a grounded theory explaining urban AI adolescent girl's processes and contextual factors relevant to sexual risk behaviors emerged. This theory shows relationships among various psychosocial processes and contextual factors among urban AI adolescent girls.

Glaser and Strauss (1967) argued that credibility or relevance of the data is a more appropriate focus in qualitative research than reliability and validity. The researcher utilized constant comparative analysis throughout the research process to determine consistency of the data, continually formulate hypotheses and reject them if not supported, identify contradictory data by pursuing unexpected findings and detect any potential misrepresentation of the truth. In order to ensure credibility and trustworthiness of the data, the preliminary results

were presented to the community advisory council at the AIHFS. This council includes AI community members of all ages from adolescents to elders. This presentation allowed the PI to present the results to the community involved in the research and it also gave the community the opportunity to offer advice to the researcher and ask questions of clarification. The feedback received at the presentation helped verify that the PI's results were credible to the community and accepted by the community.

Saturation of data and confirmation by key informants enhanced the scientific integrity of the research process. By continuing research until data saturation was achieved, the PI was able to ensure that the information received was not unique to one individual. Rather, the data from all 20 participants showed enough similarity to indicate that there were common themes among the population. Similarly, selectively sampling participants for follow up interviews helped confirm the theoretical coding that was most important to the emerging grounded theory. Ongoing discussions with the dissertation committee, other faculty mentors, and colleagues helped the researcher avoid biases, increase theoretical sensitivity, produce collaborative analysis, and provide supportive resources.

Year	2008	2009	2010	2011
What is your Age?				
What is your Grade in School (grade, repeated grades, school changes, & if dropped out)?				
What are your Activities (Jobs/Sports/Clubs/Church/etc.)? Use x---x to show when involved, for ex., x---youth group -----x				
Where do you Stay and who do you stay with? For example, x---live w/Mom, Dad, Sister---->				
Who are your Family and Friends? Other important people? (Circle who helps you)				
What Positive Events have you had or What are your Goals?				
What Negative Events or Losses have you had (Divorce, Accidents, Deaths, Violence experiences, Emotional problems, Others)?				
What is your Sexual Activity? 1. partner (use initials) 2. when (use x---x) 3. type (oral/vaginal/anal) 4. contraception including how often used <hr/> 1. partner 2. when 3. type 4. contraception <hr/> 1. partner 2. when 3. type 4. contraception <hr/> 1. partner 2. when 3. type 4. contraception				
Have you had any of these behaviors? Smoking, Alcohol, Drugs, Cutting, Eating Problems, Others)? For ex., x--Drink Alcohol/Smoke Weed→				

Figure 3. Event History Calendar. (© 2009 by The University of Michigan)

CHAPTER IV

Results

The results of the grounded theory study are presented in this chapter. The girls in this study completed demographic forms and an event history calendar, and participated in talking circles and interviews focused on sexual risk behavior. They provided an in-depth view of their family structure, their friendships and relationships, their behaviors, and their goals and dreams. The girls revealed the basic social process that frames their sexual risk behavior. First, a description of the participants will be presented, second, the basic social processes and their subsequent meaning to the grounded theory will be described, and finally the grounded theory will be described.

Who are They?

The twenty American Indians girls in this study ranged in age from 15 to 19 years old, most were full time students, lived with either one or two parents, were eligible for subsidized lunch and were on Medicaid (See Table 1). Fourteen of the participants identified as a member of the Three Fires nation. This was an expected finding based upon the historical presence of the Ojibwe, Odawa and Pottawatomi people in the Michigan and greater Great Lakes region (See Table 2). The other six participants represented tribes on the east coast and western states. All participants currently lived in urban areas.

What is Their Life Like?

The event history calendars (EHC) data that the girls reported enhanced understanding of who they were and their lifestyles. Much of the information that the girls reported on the EHCs was not elicited during the interviews and talking circles. The girls reported their long term goals, negative life events, risk behaviors, sexual behavior, and living situations on the EHCs. Eleven of the girls in this study reported they were sexually active (e.g. oral, vaginal, or anal sex) and nine did not. Most of the girls had multiple risk behaviors, lived in single family homes, and had experienced a negative event such as a death in the family or domestic violence (See Table 3, Table 4, Table 5, and Table 6). However, most also reported long term goals (e.g. college, finishing high school, and getting a job) (See Table 7).

Participants were more similar than different. The average age of those who reported sexual activity was 16.9 years. Those who reported abstinence had an average age of 17.2 years. Most of the 11 sexually active girls were lower income, eligible for subsidized lunch (n=7, 36.7%) and/or on Medicaid (n=8, 72.7%). Similarly, five nonsexually active girls (55.6%) were eligible for subsidized lunch and five (55.6%) were on Medicaid. Living situations did not vary significantly between the groups. Six (54.5%) of the sexually active girls were from single family homes, one (9.1%) was from a two parent home, one (9.1%) had a legal guardian, one (9.1%) lived in a dorm, and two (18.2%) lived with their partners. Of the nine participants who reported no history of sexual activity, five (55.6%) reported living with a single parent, two (22.2%) with two parents, one (11.1%) with other family members, and one (11.1%) in a dorm.

The majority of the girls reported at least one goal on their event history calendar. Seven (35.0%) girls reported going to college as a goal. Six of the girls who reported a goal to continue for a college education were not sexually active and the other one who was sexually active reported five lifetime partners. Two (10.0%) sexually active participants reported getting a job as their goal. Five (25.0%) participants did not report any goals on their EHC, all of these girls were sexually active. Three of the five with no reported goals listed six to ten sexual partners on their EHC and the other two had one partner each.

The majority of the girls reported at least one goal on their event history calendar. The goals included long and short term goals, including academic and non-academic goals (e.g., going to college v. getting a job) (See Table 7). Differences were seen between those who were sexually active and those who were not. Five (25%) of the sexually active girls, most of whom reported multiple sexual partners, did not report any goals. Most of the non-sexually active girls reported academic goals and six of them included going to or graduating from college. Others reported goals for making the honor roll, or graduating from high school. Of the eleven sexually active girls, six reported goals, including three with academic goals (e.g., college, passing current grade) and three with non-academic goals (e.g., getting a job, modeling/dancing).

All the girls in this study reported at least one negative event (e.g. death in the family, divorce of parents, domestic violence, abortion, rape) during the three year period asked about on the EHC, and five reported two negative events. All those who were not sexually active reported one negative event in their EHC

history. The five people who reported more than one negative event in their life were all sexually active.

Regardless of sexual activity, most of the girls in this study reported one to four other risk behaviors (e.g., substance use, fighting, cutting, eating disorders) (See Table 5). Only one girl in this study reported no sexual or other risk behaviors. The other eight girls who reported no sexual activity, reported one to three other risk behaviors (e.g., substance use, cutting, eating disorders) and the eleven sexually active participants reported one to four risk behaviors (e.g., substance use, fighting, cutting, eating disorders).

Overall, the participants in this study were more similar than different. Most of the participants were from low income families and were eligible for subsidized lunch and Medicaid. Most girls reported at least one risk behavior and negative event, lived with one or two parents, and identified long term goals on their EHC. However, the girls who were sexually active were less likely to report long term goals or goals that were academic compared to their nonsexually active counterparts.

Basic Social Process

The basic social process (BSP) is a concept developed by Glaser and Strauss (1967) and expanded by Glaser (1978). According to Glaser, the BSPs are “fundamental patterns in the organization of social behavior as it occurs over time” (p. 106). According to Reed and Runquist (2007), two types of BSPs can be identified through grounded theory methodology: basic social psychological process (BSPP) and basic social structural process (BSSP). The BSPP “focuses

on the individual, social psychological processes related to the phenomenon” whereas the BSSP focuses more on the broader structural processes of the systems involved including groups, organizations, or governments (Reed and Runquist, p. 120). Reed and Runquist argue, “A BSSP focuses on the broader structural processes inherent among groups, institutions, organizations, or governments. A BSSP may encompass or facilitate a BSPP, because the BSSP explains the greater social structure in which the BSPP occurs” (p. 120).

In this study, the BSP for the urban American Indian adolescent girls, regardless of their social, economic, or tribal status, focuses on the exposure to messages about sexual behavior from both social and structural influences. These are positive (discouraging sexual risk behavior) and negative (encouraging sex) messages about sexual behavior that influence how the adolescent reacts to and negotiate their own sexual behavior. Two BSPs emerged in this study: the psychosocial (BSPP) and the structural (BSSP). The BSPP encompassed the microsystem and the BSSP contained the mesosystem and the macrosystem. Overall, the structural system influences emerged as the primary mechanism for how the urban AI adolescent girls understand sexual behavior and how their sexual behavior is influenced.

Messages received from the systems operating around the adolescent were the greatest influence on the adolescent’s sexual behavior. Influences were from the microsystem, the mesosystem, and the macrosystem. Within the spheres of social and structural influence, the AI adolescent girls in this study are positioned at the center with goals and cultural identity framing individual identity

(microsystem). Family and peer influence closely encircled the girl, whereas neighborhood, school, the media and health care access are influential, but not to the same degree as family and peers (mesosystem). The girls in this study did not identify federal policy and tribal culture and history as significant influences on urban AI adolescent girls' sexual behavior; however, experiences they described indicated that there were influences from federal and tribal policies on their day to day lives (macrosystem).

Two main spheres of influence related to sexual behavior emerged: the microsystem and the mesosystem. In the microsystem, long term goals were revealed as a major part of the adolescents' identity and influenced sexual behavior. Similarly, cultural identity emerged as a way that young AI girls viewed and identified themselves. In the mesosystem, family, peer, school, neighborhood, media, and health care influenced sexual behavior.

Cultural identity also was clearly related to the participants' experiences with the macrosystem. Therefore, although cultural identity is also a microsystem component, it will be presented in the section on the macrosystem in order to bridge the larger concept of culture with the individual concept of cultural identity. Further, the participants did not describe the influence of the macrosystem on their daily life or on their decisions about sexual behavior or that their larger cultural/tribal history and belief system and United States federal policy were influential on urban American Indian sexual behavior. However they described experiences in their lives that included influence from the macrosystem. For instance, the ability to qualify for Medicaid or tribal health

services influenced individual health and enabled participants to protect themselves against sexually transmitted infections and pregnancy. Similarly, in the state of Michigan the Michigan Indian Tuition Waiver program allowed many participants to feel that their own dreams to attend college could be fulfilled since they met the qualifications for the program (e.g. recognized as one quarter American Indian, enrolled in a federally recognized tribe, and a legal resident of Michigan for at least 12 months). The macrosystem, although not perceived as a significant influence in daily life for the participants, nevertheless was influential for many of the participants. The results of this grounded theory study are presented in the context of the microsystem, the mesosystem, and the macrosystem in the following section.

Framing Sexual Risk Behavior: A Grounded Theory

Framing sexual risk behaviors is the social and structural process which influenced the urban AI girls' sexual risk behavior. This process involved interpretation of sexual risk behavior messages from the microsystem, mesosystem, and macrosystem that influenced their behavior. The messages the girls receive in each system of the model are critical to their experience and how they negotiate their individual system. In addition, for the urban AI girls in this study the strength and content of the messages they receive effects their perceptions about sexual risk behavior. Like Bronfenbrenner's original ecological models, 2 assumptions underly the grounded theory model. The first assumption is that reciprocal interactions between the systems of the model influence how each urban AI adolescent girl views sexual risk behavior. The

second assumption is the form, content, and strength of the processes effecting the urban AI adolescent varies depending on individual factors and environmental surroundings.

The BSPP, or the individual psychosocial processes, influenced AI girls' sexual risk behavior by helping each girl establish an identity of who they were and what they wanted to be. The BSPPs were important to the larger BSP; however, structural influences, or the BSSP, emerged as the critical influence in AI adolescent girl sexual risk behavior. The BSPP was incorporated into the larger BSSP. The individual's identity influenced how the participant acted upon the many messages they received from the structural groups and organizations present in their daily lives. Messages about sex from various structural systems including the family, friends, neighborhood, school, media, and health care influenced sexual risk behavior in AI girls. American Indian girls' sexual risk behavior in this study was most influenced by the groups and organizations in their environment.

The grounded theory that emerged in this study was consistent with and adapted from Bronfenbrenner's ecological model (See Figure 4). The urban AI adolescent girl's sexual risk behavior was influenced by their social and structural systems. The microsystem, including long term goals, identification of being a normal teenager, and cultural identity, helped the participants determine who they are and influenced them to abstain from sex, have safe sex, or have unsafe sex. American Indian girls value their cultural heritage and emphasize their AI racial identity. However, they still view themselves as normal teenagers who live

similar lives to their urban non-AI counterparts. Having long term goals influenced AI girls to avoid sexual risk behavior in order to accomplish their goals.

The mesosystem, particularly the family and friends, exerts a powerful influence on the adolescents. Adolescents are aware of the various messages, both positive and negative, from social and structural systems surrounding them. These messages are interpreted by the adolescent in the context of their life and influence their sexual behavior. Adolescents view the mesosystem structures as the most influential on their sexual behavior. The AI girls in this study viewed family as the most influential system and friends as the next most influential. Having family members to talk to about sex and receiving positive messages about sexual behavior were very influential in avoidance of sexual risk behavior. Similarly, adolescents who had friends who discouraged sex or promoted safe sex were more likely to abstain from sex or have safe sex. The neighborhood, school, media, and health care also emerged as influences on sexual behavior. American Indian girls receive messages about sex from these environmental structures which influence their own sexual behavior.

Finally, the macrosystem surrounds the adolescent. The AIs in this study did not perceive any influence from the macrosystem on sexual risk behavior. However, the macrosystem influenced the other systems surrounding the adolescent (e.g., the mesosystem and microsystem) because of the broad policy implications government decisions have on citizens. Federal and state policies

towards American Indians trickles down to the individual in the form of health care, government assistance, and even racism and prejudice.

The findings of this grounded theory are consistent with Bronfenbrenner's ecological model. Urban AI girls are similar to other urban populations in many respects. They are influenced by similar social and structural systems and have similar daily lives. However, urban AI girls are also unique compared to other urban populations. Their family systems are more open about sexual behavior and they have at least one family member (generally another girl) they can speak to about sex. They also have a unique history, culture and belief system.

Microsystem

The microsystem included how the girls viewed themselves, their beliefs, and their cultural identity. The girls in this study believed that they were similar to other adolescents living in urban areas. They emphasized the normalness of their own lives and the need to be strong AI women. The girls also felt that their personal goals and dreams were of utmost importance to their future and that their goals influenced their sexual behavior. However, they did not view their own personal sexual behavior as being influenced by their socioeconomic status, including their (or their parent's) present income level or education. While cultural identity fits with the microsystem, the results will be discussed in the macrosystem section with the larger concept of culture.

Being normal. Participants believed that they were normal adolescents who lived similar lives as other urban dwelling adolescents. All the participants had friends who were not American Indian and most had family members who

were not American Indian. Yet, despite the interracial company the girls kept, they could not see a difference between themselves and adolescents from these other racial and ethnic groups. The girls felt that their day to day life was no different than others nor were there decisions about sexual behavior. One participant remarked that adolescents “are all the same, it doesn’t matter where you live.”

However, although AI adolescents felt normal, they also had a sense of what it meant to be an American Indian woman. The girls in this study remarked on their intentions to become “strong Native women.” The idea of being strong resonated with many of the girls, particularly those who were not sexually active. These girls in particular spoke of making their people proud by pursuing their goals, particularly finishing college and becoming a role model for other AI youth. But even having these expectations for future success, the girls still felt that they were normal adolescents living normal lives.

Having goals. One area that emerged from the girls’ event history calendars, interviews and talking circles was the significance of having long term goals (See Table 7). The girls who specified long term goals reported less risky sexual behavior and had a clear plan to complete their goals. In addition, the goals of those reporting fewer risk behaviors tended to be more academic (e.g. finishing high schools, going to college).

Girls in this study saw the consequences of sexual risk behavior, particularly early childbearing, as an impediment to achievement of their goals and future success. They were aware of the negative effects on goals early child

bearing could have from observing their parents, aunts, sisters, and friends.

Some were children of teen parents and as an 18 year old who was not sexually active said, "My mom had me at a young age and it was hard for her to take care of us, not having an education and not having a good job." She was graduating from high school and had already been accepted into four different colleges. She explained, "I will be like the first on my mom's side to go to college...so I don't want to take the risk of having sex and getting pregnant. I want to finish college."

Another 17 year old who was not sexually active spoke of her own parents' struggle with having children at an early age. She stated, "They don't regret having a child...because they obviously love their own children. But their lives were completely destroyed...they couldn't pursue what they wanted to do or do anything."

Another 19 year old who was not sexually active, realized having a child young hindered a teenager's ability to reach goals by living with her aunt and uncle who had children as teens. She said her aunt "had three children before she was 16" and was never able to find adequate employment. This girl commented that people who are having sex do not think about what they want to do in five years, but instead are just worried about the present.

Others had siblings who made poor decisions regarding sex as negative examples that discouraged them from having sex because it would interfere with their future plans. One 17 year old who was sexually active noted that her sisters had babies young and their lives were now ruled by diaper changes and crying. She had no intention of having that happen to her, "I don't want to have kids

because I want to make money the right way actually... like, I want to go to college and all that stuff.”

Others referred to friends who were not able to pursue their dreams. A 16 year old who was not sexually active said her future was extremely important when considering her decisions, “I don’t want to end up like the rest of everyone else. I want to do something with my life and get away from here.” She felt that early childbearing or the consequences of acquiring a sexually transmitted infection could ruin her plans. She saw others who had children young as “taking a detour and I just want to get to my goal and do those things.”

Individuals used their goals to define who they were and what they intended to be, protecting themselves from sexual risks. Both college students and high school students who planned to go to college commented on the expectations of their parents or the excitement of being the first one in the family to go to college and how early child bearing would interfere with this. One 18 year old who was enrolled at a large university said, “I was always a very motivated student in high school. My parents went to college and I think I kind of assumed that I’d be going to college too.” Another college student, age 19, said, “I’m like, and one of my cousins too, are the only people to ever really go to college in my family.” She remarked that getting pregnant would ruin any plans for her future and said, “What a waste that would be of like all of our hard work. And I don’t think I’m ready to have a child.” She continued by saying, “my current boyfriend worked at a gas station for one summer and that’s the kind of life we would have if we don’t go to college, and have kids, which sound really

miserable.” Those still in high school had similar feelings about sexual consequences as did their college counterparts. One 16 year old participant remarked that having sex had “too many consequences” and that if she wanted to finish high school and go to culinary school she had to focus on her goals rather than worrying about sex.

Those with future plans felt they were extremely important in how each identified themselves. When participants spoke of their goals, they spoke of their life, the meaning of the goals and the rationale for their goals. Even those who had unrealistic goals (e.g., an 18 year old who dropped out of school but had plans to become a nurse and a 17 year old who was actively planning a pregnancy but said she needed to get her life together before having a baby) spoke of their goals as imperative to their life story. Going to college, becoming a chef, or becoming a licensed cosmetologist were all important examples of how the participants’ saw themselves and where they believed their lives would go.

Some of the girls in this study (N=5) reported no goals on their event history calendars (See Table 7). These girls also reported sexual and other risk behaviors. They ranged in age from 16 to 18, were all sexually active, and often academically challenged. One 16 year old never mentioned future goals on her event history calendar or during her interview. But she did note that she was not doing well in school and that she was easily distracted by her friends. Another participant, age 17, had battled depression and suicide and did not consider future goals. She was firmly rooted in the present and even in conversation had difficulty discussing future plans. Finally, an 18 year old participant reported no

long term goals on the EHC or in her interview. She was employed by a local company and had a steady boyfriend. Her life was, according to her accounts, the “best it’s been in a real long time.” This participant’s plans included keeping things status quo at work and at home.

Participants often cited their goals as a rationale for their behavior and as a justification for why they were not having sex or joining peers who were. Goals helped steer the participants to better decision making and gave them a future that they could look forward to.

Socioeconomic status. The majority of participants in this study did not think that income or education influenced sexual behavior. Most believed that income and education, particularly the education of parents, was insignificant to their own life story. One participant said, “I don’t think it [income] affects it [sex]” and another said, “Income has nothing to do with sex unless you’re really poor and you have to be a prostitute.” Two participants did think that income and education could influence others to engage in or avoid sexual behavior. One participant, a college student, explained her understanding of how social and economic status related to sexual behavior, “Lower socioeconomic families have like more teen pregnancies and things like that.” Yet she countered the influence of low income by saying, “When I see all these people at school that are from rich families and stuff...all these girls that are you know off sleeping around all the time, it makes me think what’s the difference?” Another participant thought income could influence sexual behavior related to financial consequences of pregnancy, a 16 year old sexually active participant, said:

In my family, I think it [income] does because like my mom and dad don't make that much money for me or my sisters to be having sex and then getting pregnant because they don't have enough money to raise another kid.

Yet, despite this participant's belief that her parents' would be unable to afford an additional child in the home, her concern was primarily directed toward the well-being of her family.

Education, particularly the education of parents was not identified by the participants as an influence on their sexual behavior. Similar to their beliefs on income, the girls overwhelmingly saw their parent's education as separate from their own decisions and life. One participant said, "No, it doesn't matter. She [Mom] works hard to pay the bills and be there for me and my sister. Her not going to college doesn't matter when I decide if I'm gonna have sex." However, some of the girls saw their parent's lack of education as a motivation for them to achieve their goals and avoid risk behaviors. One participant said, "My dad didn't go to college, and I'm like going to. I want a better life and job. I don't want to struggle like he does." She further stated, "I can't have a kid or do anything dumb because then I won't be able to do all the stuff I want to do." Overall, the participants in this study thought that their and their family's income and education were insignificant to their sexual behavior but believed that goals were an important influence in sexual behavior. However, many thought their own family's socioeconomic status was a motivator to avoid risk in order to achieve

personal goals. Those with goals were less likely to engage in risk behaviors that would interfere with achievement of their goals.

Mesosystem

The mesosystem included the family, friends, neighborhood, school, media, and health care access. Family emerged as the most influential factor in adolescent sexual risk behavior with friend influence emerging as the second most influential factor. The participants overwhelmingly stated that family was the primary influence on their sexual behavior. All of the participants had at least one girl family member they could speak to openly about sexual behavior and questions related to sexual behavior. Neighborhood, school, media, and health care access also emerged as significant influences for the adolescents with regards to sexual behavior.

Family. Although family has been shown to influence sexual risk behaviors in other adolescent populations, understanding the influence in urban American Indian populations is imperative. According to Red Horse et al. (1978) urban American Indian families are different than other families. They argued:

American Indian family networks assume a structure which is radically different from other extended family units in Western society...American Indian family networks, however, are structurally open and assume a village-type characteristic. Their extension is inclusive of several households representing significant relatives along vertical and horizontal lines.

Therefore, it is necessary to consider not just the immediate nuclear family, or even the immediate extended family in this grouping. Instead, in this grounded theory, it was essential to allow the participants to define the family. By asking questions generally as family and not placing limits on the family, the participants were able to give examples of people who they considered family including parents, siblings, grandparents, cousins, aunts, uncles, and legal guardians.

Family was an important influence on AI adolescent girls' sexual behavior and knowledge about safe sex. Three important themes emerged related to family influence: 1) networks of family influences; 2) talking about sex with at least one family member, usually another female; and 3) varying types of messages about sexual behavior among family members, including those who discouraged and those who encouraged sex.

Networks of family. Fathers, mothers, grandmothers, and sisters were described as having a strong influence on the girls' sexual behavior. Participants stated, "My dad definitely influences me not to have sex," "My dad influenced me not have sex. My mom was 16 when she had me," and "My mom and her mom were on my head about safe sex....they don't want us to get pregnant or have diseases." A 17 year old sexually active participant stated:

[My mom] just doesn't want me to have sex at all...She told me to wait until I'm ready...I talk about sex with my mom and sister on a daily basis...sometimes my sister hides condoms everywhere I can find it. She's just saying to be safe.

Another participant, age 18, explained that her parents influenced her decisions about sex because she was concerned about their opinion of her. She explained, “I think my family has influenced me some to not have sex because I don’t like disappointing them.”

Talking about sex. Having a family member to talk with openly about sex was identified as a major influence on their sexual behavior for the girls in this study. They described a network of family including parents, siblings, aunts, grandmothers, and cousins who they could talk to about sex. All of the girls in the study had at least one family member they could discuss sex with openly. A 17 year old non-sexually active participant explained how she could talk to both the older and younger people in her family about sex. The conversations varied depending on who she talked to in the family, but she still felt comfortable talking to family members about sex. She stated:

I can talk about sex with my grandparents or like I said the older women in my family, but it’s more of a just don’t have sex kind of conversation. My older cousins, they talk about sex openly and safe sex and I learned from their mistakes.

Another 19 year old participant who was not sexually active said, “I’ll talk to my cousins and all but my parents it’s still like nonexistent...They don’t talk about it but they do expect me to wait until I’m married.” In this case, even though the 19 year old did not openly discuss sex with her parents, she still understood her family’s expectations about sexual behavior and had other family members who she could talk to about sex. A 16 year old agreed and stated “I’m

not really open with my mom and dad....but I have an older sister and she's the only one I can go to and tell everything to."

In general the girls appreciated having someone to talk to within their family, but they often chose to talk to younger members of their family like siblings and cousins rather than the older generations. One girl cited her cousins understanding of what she deals with on a daily basis as her rationale for consulting with them rather than with her mom. Others stated that their parents and grandparents were staunchly opposed to adolescents having sex, even if they were practicing safe sex. Therefore, conversations with the older generation were often uncomfortable. One 17 year old explained, "My grandma thinks nobody should have sex until you're married. But I don't ever really talk to like my mom or anything about it." This particular participant had older sisters and relied on their advice regarding safe sex and also learned from their mistakes. Although sexually active, she used birth control 100% of the time and said, "I don't want to have kids like my sisters...I don't want to be like them."

All of the participants in this study stated that they had at least one family member who was available to discuss sexual questions and behavior. Most of the participants cited female family members as the person they would choose to talk to. In fact, of the 20 participants, only two cited a male family member (in both cases their father) as a primary person they would communicate with about sexual behavior and safe sex. However, both of these girls also cited their sister as another primary person who they would communicate with about sex. This female relationship is important as a method for young urban AI girls to engage

others about the questions all adolescents generate about sexual behavior and activity.

Varying messages about sex. Family is a strong influence on safe sex practices. Hadley et al. (2009) found that adolescents who discussed the importance of safe sex and condom use with their parents were more likely to practice safe sex. This grounded theory study found that family messages regarding sex were important to the adolescent. Girls in this study believed that the messages they received from family members about sex had an influence on their sexual initiation, safe sex practices, and decisions to abstain from sex.

Messages discouraging sexual risk behavior. Participants in this study believed that family members who discouraged sexual risk behaviors and promoted safe sex behaviors influenced their decisions about sex. A 17 year old participant stated that she and her mother frequently discussed birth control methods. She said, “My mom knows I get the depo shot because she made me get it.” Others were even more open about birth control options and safe sex. Another 17 year old had an open relationship about sex with her mother. She believed that her mom helped her stay safe. She explained:

My mom just basically told me I had to be safe and stuff. She told me that basically if I was going to do that I should be safe about it and play it smart and, you know, get on birth control and things like that if I wanted to have sex...They [my family] would rather I have safe sex...I should always be safe...She'll [my mom] take me to my appointments at Planned Parenthood and sometimes she'll even schedule them for me

Others got similar messages from their family members. One 15 year old said her mom constantly lectures her about safe sex. She said one of her mom's favorite sayings is, "If you think you are grown enough to have sex, then you are grown enough to have safe sex. Always use a condom."

Messages encouraging sex. Yet, although many participants had family members who were encouraging safe sex or abstinence, others felt that their decisions to become sexually active were also influenced by their family members. Not all family influence was positive and did not routinely promote abstinence or safe sex if the decision was made to become sexually active. For some, the desire to be accepted by their older siblings and cousins was a primary influence in becoming sexually active. In fact, upon reflection these girls often stated that they wished they had waited, but in their early adolescent years felt that by being sexually active they would be included in the older adolescent family member's social group and that was more important.

Two of the most striking examples emerged from a 17 year old and 15 year old's account of why they each chose to become sexually active. The 17 year old stated, "I did it because all my sisters were doing it. Now it's just like I have already done it. When I was younger I guess I just wanted to be like my sisters." She went on to state that she knows now that her choice to have sex was made for the wrong reasons, but feels like she now has the maturity to make her own choices without concern for her social status with her siblings.

The 15 year old had similar influences and a desire to be like her older cousins. She stated, "My two cousins...no three of my cousins are all older than

me. They are like 16. Two of them tell me I should have sex and one of them tells me I shouldn't." When probed about safe sex communication, the participant responded that "sometimes" she received information from her cousins about safe sex, but they primarily discussed sexual activity and not safety. This participant valued family, but did not have many family members to communicate with since her Grandmother had kicked her out of the house and denied her access to her siblings, her mother was in a drug rehabilitation program, and her father was in prison. Therefore, she depended on her older cousins to give guidance and valued their beliefs and guidance regarding sexual activity. For this participant, and for the other participants in this study, family was the strongest influence in the girls' lives.

However, participants often got mixed messages from family members. The previous example illustrated how two cousins encouraged sex and one discouraged sex. Other participants in the study had similar experiences. A sexually active 19 year old felt that having family members to talk to about sex was helpful, particularly after her mother died. However, she felt that there were often mixed messages from different family members. She described her own experience with discussing sex with family and said:

After my mom died, everybody on my mom's side tried to give me sex talks...I got really mixed messages from people. Some of my aunts think if you're ready, go for it; and some people were like 'no' don't do anything."

Similarly, participants often received mixed messages from different familial generations. Participants most often cited their grandparents and parents as

family members who discouraged sexual risk behavior and promoted safe sex and younger family members (e.g., siblings and cousins) as the family members who encouraged sexual activity.

Each participant in this study felt that their family helped influence their behavior about sex, although many received mixed messages about sexual behavior. They all felt a strong connection with their family members, valued their family's input about their behavior, and had at least one family member who they could openly ask questions about sex.

Friends. Friend influence has similarly been considered a factor in adolescent risk behavior (Brown et al., 1992; Bryant & Zimmerman, 2002; Gillmore et al., 1997; Heinrich et al., 2006; Kotchick et al., 2001; Prinstein et al., 2001; Romer et al., 1994; Stanton et al., 1994). In this study, participants cited family as the most important factor influencing their knowledge and decisions regarding sexual behavior. However, friend influence was most commonly identified after family as an influence on sexual behavior. Three important themes emerged related to friend influence: 1) friends discourage sexual risk behavior; 2) friends encourage sex; and 3) friends are often family members. Similar to studies with other racial groups in urban areas, AI adolescents who were sexually active were more likely to be friends with others who were sexually active (Kotchick et al.; Miller et al., 2000; Romer et al., 1994).

Friends who discourage sexual risk behavior. Many participants in this study, particularly those who were not sexually active, cited their friends as an important influence for avoiding sexual risk behavior. Having friends who

were not engaging in sexual activity helped participants feel comfortable with their own decision to abstain. A 16 year old who was not sexually active stated “my friends don’t have sex” and “I don’t really talk to them [the girls at school who are having sex].” She explained that she felt no pressure from her boyfriend to have sex because none of his friends were having sex either. Therefore, she felt comfortable continuing to abstain and did not feel like her relationships would suffer because of her decision.

Similarly, an 18 year old college student who was not sexually active felt that her friends were similar to her. She stated, “my best friend just recently started having sex, but most of my close friends haven’t really.” She noted that her friends’ common bond of not having sex “probably impacts why we connect.” This participant felt that her friends were there to help her make good decisions and that she would feel like she disappointed them if she did not adhere to the groups’ norms. She said, “There would be some judgment from some of my friends if I just found someone and just started having sex.” However, she felt that if she found a partner and was in a committed relationship, her friends would support her decision to have sex. But, she believed that her friends would expect her to practice safe sex.

Another participant, a 19 year old who also was not sexually active felt that friends were important, but did not influence her decisions. She stated “some of my friends had sex and all but none of them influence me to do anything.” She explained that her friends were supportive of her religious convictions to abstain until marriage and that when the topic of sex came up

within the group her friends always spoke about safe sex or no sex. It was important for this participant to maintain her friendship group and feel respected for her religious decisions for remaining abstinent. She aligned herself with other girls who understood and respected her belief system. Because of this purposeful choice of friends, the participant limited peer pressure to have sex.

Girls in this study reported their friends as influences on their sexual behavior. Those who had friends who discouraged sex or promoted safe sex felt supported in their decisions to avoid sexual risk behavior. Participants, particularly those who were not sexually active, allied themselves with others who respected their desire to abstain and felt that these friendships helped them ignore peer pressure from others.

Friend who encourage sex. Many girls felt pressure to have sex to fit in with their friends or for acceptance from their partners or boys in school. Multiple participants also reflected on how their decision to initiate sex in early adolescence was shaped by friend influence. An 18 year old with four sexual partners over a three year period stated that friends were a primary influence in her decision to have sex. She said, "I made a lot of bad decisions like who I chose to hang around...I just gave into all the peer pressure when I was younger." She continued, "I just wanted to leave out with my friends a lot and like stay away from the house...I kind of got exposed to having sex and a lot of people make it seem like it's alright." This participant explained that none of her friends ever spoke about safe sex or birth control. She felt lucky that she never got pregnant but she did contract a sexually transmitted infection. She described

catching chlamydia, “I ended up catching an STD and it like changed everything...so, I really don’t want to go through that again.”

A 16 year old sexually active participant with nine partners in three years, who reported using contraception the majority of the time, had similar views that her friends influence her to have sex. She stated that “about 60% of my friends are having sex” and felt constant pressure from friends and partners to engage in sexual intercourse. Different messages were received from girlfriends and boyfriends, with more protective influences from girlfriends and more risk influences from boyfriends. She and her girlfriends were very open with one another about their disapproval of their sexual decisions, although they continued to have sex. “We’ll sometimes tell each other we’re wrong or something by sleeping with dudes we shouldn’t or sleeping around, we’ll tell like each other that that’s not right.” She also felt that her peer group supported one another to have safe sex. For instance, she stated, “I do have one friend that’s never safe, but I do encourage her to use condoms...and if I have condoms, I’ll give her mine.”

This participant felt that her female friends helped “keep me straight” but that boyfriends are often the ones who pressure girls to have sex. She explained this belief that boyfriends pressure girls, “Sometimes it’ll be the person I’m with because they’ll say like oh, it’s all right, but I don’t know. Sometimes I’ll just go along with it even though I know it’s not right.” Peer pressure, particularly pressure from close friends, clearly influenced participants’ decisions regarding sexual activity and although they had supportive family members, they often felt

the need to fit in with friends, which entailed continuing to be sexually active as well as engaging in other risk behaviors such as drinking and substance use.

Similarly, other participants felt that their friends encouraged them to have sex regardless of whether it was safe sex or not. Two participants who were friends, ages 17 and 18, both stated that “all our friends are having sex.” The 17 year old had eight sexual partners in three years and had an abortion and a miscarriage in a two year time period. The 18 year old had seven sexual partners in a three year period and had one abortion. They both stated that they talked about sex with one another “all the time” as well as with their larger friendship group and that sex was a normal part of any adolescent relationship. Both believed that safe sex was important but reported infrequent contraceptive use and denied conversations with friends about safe sex.

Another participant who was 15 years old reported that she and her friends spoke about sex “all the time” but never about safe sex. Although she understood the dangers of unprotected sex, she and her friends never practiced safe sex. In fact, although this participant had five lifetime partners, she never once used contraception to prevent pregnancy or STIs nor did her friends use any form of contraception. She said,

I don't really think about them [the risks of having unprotected sex]. But, then I feel like I'm just really lucky. When I think about them, I'm like oh, I should probably use a condom next time. And then I don't.

Participants often were friends with others who were also sexually active and conversations about sex were normal within the group of friends. When sex was

discussed within the friendship group, safe sex was often not included in the conversation. In fact, those who were sexually active were less likely to report discussions about safe sex with their friends compared to those who were not sexually active.

However, despite some participants feeling that there was significant encouragement from their friends to have sex, some still chose to remain abstinent. A 19 year old who was not sexually active believed that her friends thought she was abnormal because she wasn't having sex. She stated that her friends "influence me to have sex. They say I should because I'm 19 and they say I'm too old to be a virgin." She continued by saying "some girls haven't had sex and some girls have had sex. They [the ones who have sex] don't want to be your friends if you don't." However, she decided to abstain from sexual activity in spite of constant peer pressure because "friends come and go and family is forever." Encouragement to have sex did not necessarily mean that an adolescent will be sexually active. Those who received messages from other sources, particularly their family members, often chose to follow the expectations from the other sources, rather than their friends.

Girls in this study believed that friends often encouraged sexual behavior. Participants who were sexually active were more likely than those who were not to report friendship groups that discuss sex frequently, omit safe sex conversations, and normalize adolescent sexual behavior. However, the messages received from friends were often less influential than the messages received from other systems (e.g., the family). Those who received family

messages to abstain from sex or practice safe sex were more likely to follow family messages as opposed to friend messages.

Sexual initiation. Friends encouraging friends to have sex was a common theme reported by participants. Many of the participants believed that their own decision to initiate sexual activity was influenced by their friends. In particular, losing one's virginity at a young age was a theme reported by those who were sexually active. A 15 year old participant with five sexual partners lost her virginity in the 8th grade when she was 14 years old. She said, "I guess it was just because all of my friends had done it...and I felt like at 14 I was like yea, I'm a virgin still." She believed that most of her friends were losing their virginity around the age of 11 which made her abnormal compared to her peers. Her best friend was a particularly strong influence on her decision. She explained her behavior in the context of her best friend's behavior:

One of my friends, she's like a complete slut, but I love her anyway. And it's just kind of like I'm not as bad as her. So, I guess like the little that I do, it's really no big deal. I just don't see that as like as bad as my friend, so I'm just like whatever.

Another 15 year old participant also lost her virginity in the 8th grade at age 14. She had two sexual partners in two years and never used contraception. She stated, "Everyone was talking about it [sex]. So I was like, well, let me just get it over with. So I did." An 18 year old, who lost her virginity when she was 15, believed that losing one's virginity in early adolescence was normal behavior. She said, "I think most of my friends lost their virginity when they were 15 or

younger.” She believed that when she lost her virginity she was older than average, particularly since her best friend had lost her virginity at age 13.

Early sexual initiation was often influenced by friends. Girls often cited their friends as a reason for initiation sexual activity. Fitting in with the group was a common explanation for why participants chose to have sex in early adolescence. The girls wanted to fit in with their friends and felt that if they were not having sex, they were not the same as their friends.

Pressure from boys. Participants also cited pressure from boys as another factor influencing their sexual behavior. There were differences between the pressure girls felt from their girlfriends and those they felt from boys.

Pressure from boys was often directed at girls who were already sexually active and often bordered on harassment. For example, a 15 year old who was sexually active felt immense pressure from the boys at school to have sex. The participant stated that boys focus on the girls they think they could have sex with and ignore the large number of girls in her school who were from a conservative religious group. Another participant, age 16 had similar experiences with the boys in her school. Once the boys in her school found out she had sex with her boyfriend of over a year, they targeted her and harassed her. She felt constant pressure from her male classmates to have sex.

Boys were often considered predatory towards girls that were sexually active. A 17 year old participant remarked that in her neighborhood, the boys began to make sexual comments at girls as soon as they hit puberty. The girls described constant cat-calls and sexually derogatory comments from boys

directed towards them as well as occasional incidents of groping on the street. Participants believed that boys in their school and neighborhoods were constantly harassing girls to have sex. They felt constant pressure to give in to the demands for sex from the boys. When girls found themselves in situations where they were alone with boys and pressured, they often gave in to the demands of the boys.

Friends and family overlap. The final theme that emerged related to friends' influence was the connection and overlap between family and friends. Many of the girls in the study considered their family members (e.g. cousins, sisters, etc.) as within their friend group. One 18 year old explained that she and her sister were best friends and shared information about relationships and boys with one another. The 16 year old sister agreed that she and her sister were best friends and felt that her relationship with her sister was the most important friend she had. Another participant, age 17, who was sexually active, considered her sisters her best friends and her primary friend group. She regularly spent time with her sisters over other friends and credits their influence in her decision to begin having sex before she was ready.

It is often difficult to draw clear lines between the AI family's sphere of influence and the peer group's sphere of influence because there is often considerable overlap in the two groups. It is necessary when considering the spheres of influence to understand that family and peers are often not mutually exclusive and therefore, must be understood as relationships that can take upon different forms and yet exert similar influence. However, friends clearly influence

sexual behavior in urban AI adolescent girls. Girls who have friends that normalize adolescent sexual activity are more likely to engage in sexual behavior. Similarly, those in friendship groups with adolescents who do not practice safe sex are less likely to practice safe sex. In contrast, those who receive strong messages from friends to abstain from sex or practice safe sex are more likely to avoid risky sexual behavior. Friends are an important influence in AI adolescent sexual behavior.

Neighborhood. Similar to the family and friend sphere of influence, the neighborhood environment was reported by participants as an influence on sexual behavior. Previous studies with non-American Indian urban adolescents found that neighborhood influenced sexual risk behavior (Baumer & South, 2001; Browning et al., 2008; Chen et al., 2010; Cubbin et al., 2005; Duncan et al., 2003; Kim, 2010). In this grounded theory study, neighborhood was noted as an influence on sexual behavior by participants although they described family and friends as more influential. The majority saw some connection between their sexual behavior and their neighborhood. Those who grew up in conservative neighborhoods (e.g., suburbs outside large urban areas, religious communities, neighborhoods deemed “safe” by participants) felt that this influenced them to abstain from sexual activity. Those who lived in less conservative areas (e.g., urban, inner-city areas, neighborhoods deemed “unsafe” by participants) reacted in two distinct ways regarding sexual behavior. The first reaction was to follow the normative sexual behaviors of the community to fit and feel accepted. The second reaction was to ignore common sexual behaviors and make decisions

based upon a desire to exit the neighborhood and lifestyle. Two themes emerged related to neighborhood influence: 1) the neighborhood discouraged sexual risk behavior; and 2) the neighborhood encouraged sex.

Discouraging sexual risk behavior. The neighborhood discouraged many participants from sexual risk behavior. The safety of the neighborhood, the people residing in the neighborhood, and the neighborhood belief system were all important factors influencing AI sexual risk behavior. One 18 year old non-sexually active participant felt that her conservative neighborhood influenced her sexual behavior. She stated, “The community was definitely conservative, so that probably influenced, to an extent. Like you need to be Christian and Godly and not engage in anything like that.”

Another participant, age 19 agreed and stated, “People in my neighborhood aren’t doing anything bad. They all work hard and stuff. They all know me and my family. I know I’m safe there.” Participants who believed their neighborhoods discouraged sex described knowing their neighbors and feeling safe in their neighborhood. Girls who felt connected to their neighborhood and believed that people in their neighborhood were looking out for them were more likely to describe the neighborhood as a protective influence on sexual behavior.

Encouraging sex. Although some participants described their neighborhood as safe, others had opposite views of where they lived. Some girls believed that their neighborhood encouraged sexual behavior. Those who believed their neighborhoods encouraged sexual behavior reported two strategies. The first was to follow the normative sexual behavior of the

neighborhood to fit in and the second was to ignore the messages from the neighborhood with the goal of leaving the neighborhood.

Fitting in. Girls in this study often made the choice to follow normative behaviors in the neighborhood in order to fit in and feel protected. This acceptance of neighborhood norms helped the girls feel that they were part of the neighborhood and therefore protected. A 17 year old sexually active participant believed that her neighborhood was a strong influence on her sexual behavior. She lived in what she called “the hood” and had lost two brothers to gang violence in a three year period. She remarked how girls were treated as objects and endured a constant barrage of comments from neighborhood boys. She explained, “You walk down the street and like guys yell at you and so it was very influential like when I was younger because my sister were always doing it with those boys who were yelling at us.” Similarly, a 15 year old participant recently moved from the inner city of Detroit to an outlying suburb. She said that her previous neighborhood was “not safe...because that’s where everyone was having sex. All the older guys were like, yeah. They would like feel up on you and everything.”

Girls in this study reported that they often succumbed to the neighborhood pressure to have sex in order to fit in with others and feel like they were part of a larger group. In some areas that were particularly unsafe or dangerous, participants believed that having sex with neighborhood members helped keep them safe from violence.

Participants who reported their neighborhood as unsafe or believed that those living in their neighborhood encouraged sexual behavior all described their neighborhood as an influence on sexual behavior. Girls who felt pressure from their neighborhood to have sex often conformed to neighborhood normative behavior in order to feel safe and protected.

Leaving unsafe neighborhoods. One theme related to neighborhood that emerged was that participants wanted to leave their neighborhood. These participants tended to be abstinent or practice safe sex. One 16 year old abstained from sex because she wanted to leave her neighborhood and she felt that she couldn't do that if she got pregnant or made any large mistakes. She said, "My mom doesn't make a lot of money. My mom never really went to college and the neighborhood we live in isn't the greatest. So, I just want to be able to put myself higher." Another participant, age 17 and sexually active who used contraception 100% of the time said, "I don't want to live in the hood and all that...my sisters are stuck there because they had babies. That isn't gonna happen to me." Participants viewed leaving their neighborhood as an indication of their own success, particularly those who described their neighborhoods as unsafe. Subsequently, those girls who wanted to leave their neighborhood were more likely to abstain from sex completely or practice safe sex. They saw older family members and friends who lived in their neighborhood and were not able to leave because of the consequences of sexual risk behavior. Many pointed to their siblings and cousins who had babies as teenagers and were now "stuck" in

their neighborhood. Participants believed that leaving their current surroundings would mean that their life would have a different ending than others around them.

Neighborhood emerged as an influence for urban AI adolescent girls. The majority of participants saw some connection between their sexual behavior and their neighborhood. Participants from safe neighborhoods believed that their community discouraged sexual risk behavior; whereas, those from unsafe communities viewed their neighborhood as encouraging sexual behavior. In addition, those who lived in unsafe neighborhoods, particularly those who were abstinent or had safe sex, had the desire to leave their neighborhood.

School. School emerged as an influence similar to that of the neighborhood. In this study, participants overwhelmingly cited the school as a place where sexual behavior was on display and where introductory teaching about reproduction, sexual consequences, contraception, and abstinence occurred. Many of the girls believed that the school environment helped influence their own decisions about sexual behavior. Three major themes emerged related to school: 1) belief that most teens in schools are having sex; 2) sex education courses are not enough for an adolescent's understanding of sexual risk behavior; and 3) out of school organized youth groups are needed to supplement school based sex education programs.

Everyone is having sex. All the participants believed that the majority of people within their schools were having sex. Most also felt that the pressure to have sex within the school was immense. Participants talked about girls displaying their promiscuity (e.g. "acting like sluts") or the number of girls within

their school who experienced an unplanned pregnancy. One non-sexually active 16 year old felt that school was a major factor that influenced sexual behavior and said, "I think its [school] got a big influence. No matter what school you go to, poor or rich...it's the same in every school. Peer pressure about sex and everyone is having it." She continued by saying, "Girls in my high school want to get pregnant. It's gross." A 19 year old sexually active participant felt similarly about school. She believed that, "School had a big influence on everything," and a 16 year old sexually active participant agreed stating, "My school it's like every kid is doing it like I don't know one person that hasn't, my schools bad." Another 19 year old who abstained from sexual activity remarked, "At school the girls hang out a lot more...and girls start wondering what guys can do or what girls can do and start experimenting a little too early."

Participants reported that school was a place where sexual messages were relayed. All the girls saw schoolmates who became pregnant and others described feeling pressure from those at school to have sex. The urban AI adolescent girls saw other students who were open about their sexuality which influenced their sexual behavior.

In addition, participants often felt pressure from the boys in their school to have sex. One 16 year old, sexually active participant noted that boys in her school would focus on the girls that they thought they had a chance of having sex with and leave the other girls alone. Therefore, this participant often felt harassed by males in her high school because they saw her as potentially willing. Another 15 year old sexually active girl said that once the boys in her school

found out she had sex, they constantly talked to her and tried to convince her to have sex with them. She felt that it was hard to avoid the pressure because even during classroom periods the boys would make hand gestures or lewd comments to her about sex. Many of the girls felt that these sexual messages, coupled with harassment by boys within the school system influenced their decisions to have sex.

Sex education is not enough. Although school often acted as a place where girls could be targeted by others or pressured to have sex, it also acted as a place where education occurred regarding sexual behavior. Sex education acted as an important part in urban AI adolescent girls' knowledge about sexual risk behavior. However, according to participants, it was often taught too late to influence sexual behavior or the information received about safe sex was not adequate to help protect teens. Only one participant in this study reported never receiving a sex education course in school. All the others had at least one health class that focused on sex.

For urban AI girls, reproductive health classes often began in middle school with the bulk of safe sex education occurring in high school. However, education significantly varied. Two sexually active girls, ages 17 and 18, had sex education courses "one hour every day for an entire school year." Yet others stated that their education was limited. One 17 year old who was not sexually active said:

In high school they brought it up...they didn't talk about birth control because I guess they weren't allowed to but we talked about condoms and

then, I know a lot of girls started using birth control when they had sex.

So, it's just that's how I found out about safe sex.

Another participant said that her health class focused on “how things work and not really how to be safe or make sure you do stuff right.” A 17 year old who was sexually active discussed her experience in sex education class, “They taught us the reproductive organs and what you can do not to get pregnant.” A 15 year old who was sexually active said that her official sex education course had just started two months prior to the interview. She had already been sexually active for a year when her school based sex education course took place. Only a few of the participants believed that their school based sex education course was adequate in teaching them about safe sex and avoidance of sexual risk behavior. Most attributed their knowledge about safe sexual behavior to their family, friends, and out of school youth groups.

Sex education in AI youth groups. Although not a part of the school system, AI youth groups that ran during the academic year and often in the summers were a way for many urban AI girls to learn about safe sex. The majority of girls in this study attended an AI youth group at some point in their adolescent life. These groups encouraged health promotion activities such as abstinence and safe sex. The youth groups cited by participants were often geared towards American Indian youth, included both boys and girls, and integrated cultural teaching (e.g., learning about menstruation from a traditional perspective) into information about health and reproductive health. Three participants, ages 15, 16, and 18, all believed that the after school youth group

they attended at the American Indian community center in urban Detroit helped them avoid risk behaviors. All three had a history of drug and alcohol use, but they cited the community center for teaching them about safe sex and giving them an outlet to discuss sexual behavior. They believed that the pressure they felt at school to have sex was curtailed by the support they received at the community center to avoid the consequences of sexual behavior. The three participants also felt that if they made the decision to have sex, that they were better prepared because of the youth group.

Other participants who had previously been involved in the youth group at the same community center cited the program's educational activities and felt that their understanding was enhanced by attending the program. A 15 year old, sexually active participant stated that she used to go to the community center weekly, but no longer attended. Although not practicing safe sex, she said she understood about sex and ways to be safe based upon the sex education teaching at the community center, not from her school program.

Other participants who were now 18 or 19 stated that they previously attended the youth group and learned about safe behavior from the group leaders at the community center. Similarly, another 15 year old sexually active adolescent said she learned about safe sex from a different AI community center located in an urban area outside of Detroit. This participant also did not practice safe sex; however, she felt that she had all the knowledge to practice safe sex from the community center programs not the school based programs.

Out of school youth groups, particularly those that were geared toward urban American Indian youth were cited by many participants as instrumental in their knowledge about sexual behavior. Participants also believed that having the youth groups influenced their behavior because they felt supported by the youth group leaders and group members. American Indian girls in urban areas are open to learning about sexual risk behavior and safe sex. Programs that respect the cultural uniqueness of the AI as well as promote healthy behaviors are valued by the girls and influence their decisions about sex.

School was an influence on many girls on how they perceived normal adolescent behavior. The girls in this study tended to normalize sexual activity and assumed that the majority of adolescents in their school were having sex. School also emerged as a place where learning about sexual activity occurred, although the curriculum varied based on the school district. However, although the school was instrumental in teaching AI youth about sex, youth groups often supplemented the knowledge taught at school. Urban AI girls believed that after school programs for AI teens were influential on their sexual behavior. The school and after school activities were pivotal to young people learning about sexual activity. Urban AI adolescent girls look to the school and after school youth groups for guidance and information.

Mass media. One issue that arose from the school and neighborhood questions was the influence of the mass media and popular culture on sexual behavior. Sexual content is embedded in all types of media including music, television, movies and magazines (Christenson & Roberts, 1998; Cope-Farrar &

Kunkel, 2002; Lowry & Shidler, 2002; Pardun, 2002). The girls in this study believed that media, particularly TV shows, influence AI adolescent sexual behavior.

Current shows such as “16 and Pregnant,” “Jersey Shore,” and “Teen Mom” arose in the interviews and talking circles as content that teens watched regularly. The majority of participants admitted to watching these reality shows and felt that TV was one way that they learned about sexual behavior. However, even though the majority watched the shows, many viewed the show as “disgusting” or “nasty” but felt that their peers were influenced by the onscreen behavior. One 18 year old non-sexually active participant said, “Jersey Shore...that’s actually one of my favorite shows.” She continued by saying:

But I know the difference so that’s a difference too. I think of it as just drama and, you know, I think it’s funny. It’s not ever going to happen to me, so I don’t have to worry about it...but some kids can’t, don’t think there’s a difference. They think that’s everybody’s life. That’s how you do this, you do that. I don’t know. And the ‘Secret Life’, there’s lots of shows that are very influencing about sex and how it’s not a big deal and it’s okay. And they’ll say as long as you wear a condom, it’s okay.

Although this participant said she hated “Secret Life” she also went on to say that she watched it weekly with her younger sister.

Another participant, age 16 and not sexually active said that she also watched a wide variety of reality shows and enjoyed them. However, she learned from the shows and said, “Watching ‘Teen Mom’ and ‘16 and Pregnant’ ,

it just looks miserable and I don't ever want to have kids at this age." Many of the girls cited the drama of the programs as a draw but also stated that they knew the show was not "true reality." Even if an adolescent understands that the show is sensationalized for TV, watching shows that normalize risk behaviors can influence adolescent behavior. Many of the participants watched MTV reality TV regularly and a few even thought the shows depicted normal adolescent behaviors.

One participant, age 18 who was sexually active and was pregnant at the follow up interview felt that TV shows were a significant influence on sexual behavior in adolescents. Shows like "Teen Mom" sent messages to adolescents about the acceptability of sexual behavior. She explained, "Because you see all these teen moms having babies and it looks like they're doing okay, so that influence you to have sex." When asked if that was an influence for her she commented that it made her think that sex was not a big deal. But, now that she is pregnant she thinks that being a mom is not as easy as it looks on TV. She expressed concern about being able to have a child, continue with cosmetology school, and eventually work outside the home.

Other participants also felt that TV could influence adolescent sexual behavior. A 17 year old who was also sexually active cited TV as a major influence on sexual behavior. She said, "They always have something on with people doing it." After the interview she joked about how she and her friends talked about getting on a teen reality show and how the MTV reality shows were influential for her group of friends.

The media, although not reported by participants to be as influential as family, friends, neighborhood, and school still influenced the lives of the participants. Mass media arose as a significant theme despite the interviewer not asking a single question specifically about mass media in the talking circles and interviews. American Indian adolescents are watching TV shows that portray teen sex as normal, healthy behavior. This normalization of sex influences the behavior of AI girls.

Health care. Health care emerged as an influence on sexual behavior. According to the CDC (2011a), health care access improves the health of those with and without disabilities. Similarly, according to the PanAmerican Health Organization and World Health Organization (2000), individual's sexual health can improve with access to health care and trained health care providers. This study revealed two themes for urban adolescent AIs with regards to health care: 1) trusting the health care providers; and 2) access to health care services.

Trusting providers. Trusting health care providers emerged as an important issue for AI adolescents. There is significant evidence that American Indians have a greater mistrust of the medical system compared to their White counterparts (Guadagnolo et al., 2009). Previous studies have also shown that American Indians who have a negative experience with a health care provider, whether it is a cultural mismatch or negative perception regarding care, had a greater mistrust of the larger health care system (Buchwald et al., 2006; Hunt, Gaba, & Lavizzo-Mourey, 2005). Participants utilized various health care centers and providers for health care. Girls in this study reported receiving health care

services from nurse practitioners, certified nurse-midwives, family medicine, pediatric, and gynecologists for sexual health care as well as for routine primary care. Participants reported receiving services from an AI health care center, private medical offices, and public organizations (e.g., Planned Parenthood).

In this study, the majority of participants trusted their health care provider and the larger medical system. Participants felt that health care providers had their best interest in mind and believed that the girls' safety was of utmost importance. An 18 year old said, "I feel like they'll provide me with what I need." A 17 year old discussing the certified nurse-midwife she saw for sexual health care asserted, "She answers every question, like every question, I have she answers it and I feel more educated when I leave. I trust her. I know she is telling me the truth."

Another 15 year old agreed that health care providers help adolescents stay safe and said, "They [providers] go into details and give you pamphlets or even if you want them to show you or you can go in to see a doctor and get check-ups or whatever." A 19 year old said, "I trust like general medicine." Similarly, a 17 year old said, "I never feel judged. I think that they support me because it's my decision and they know that it's my decision and it's gonna happen. They just try to protect me the best way they can."

Girls in this study believed that seeing doctors and advanced practice nurses improved their sexual health. An 18 year old explained how going to see a health care provider improved her own sexual health:

I definitely think it does [help] because they give you free condoms here

and they tell you basically what, and knowing that someone else out there you know will help you understand...But it definitely helps you influence, especially because you can get condoms and be safe.

Only three girls in this study reported an experience with a health care provider that they described as “negative.” These negative experiences included receiving false information and feeling that the provider was ignoring the participants’ needs. Yet, despite the negative experience, two stated that they trusted health care providers and felt comfortable seeking care for sexual health care needs. However, even though the participants overwhelmingly trusted their health care providers, many expressed discomfort with providers who were much older or male. Although some girls felt comfortable talking to their family physician about sexual health needs, others wanted to separate general health from sexual health. One participant went to Planned Parenthood for birth control in order to avoid her family physician. She felt uncomfortable going to him since he had known her since infancy and he was much older than she was. Others felt that male providers made sexual health questions more uncomfortable than a female provider. Therefore, they tended to deliberately schedule appointments with female physicians or advanced practice nurses. One participant said, “My doctor is like this old guy and my mom’s doctor is some young lady.” She later said, “I would go to the lady if I needed stuff for sex because I would be really uncomfortable with him.”

Yet, although some people felt uncomfortable with their family physician, the majority of those who received care from a trusted family physician or

advanced practice nurse stated that they felt comfortable seeking care. In particular, those who received services directly from the American Indian health care center felt very comfortable accessing services. One 15 year old said, “Yea, I trust them...because I know them. I know all of them. I’ve been there ever since I was a little kid. And they all know me.” Another 16 year old agreed, “People don’t know that there is help out there because there’s not enough places to do what the center does.” An 18 year old had a similar view and remarked, “A lot of people don’t know some of the stuff they teach you here [at the center] or at any other clinic. They further your knowledge.”

Those who accessed the American Indian health care center appreciated the cultural competency of the providers and the fact that referrals could be made quickly within the center. They also spoke highly of the center’s current focus on providing traditional healing methods to the array of services. Cultural competency was an issue that participants felt that the American Indian health center did well. They liked receiving care in an environment where their culture and beliefs were respected.

Trusting health care providers and the general medical system was a phenomenon described by most participants. Unlike the literature on the larger American Indian population, urban American Indian girls feel comfortable receiving care from health care providers. However, they appreciate those providers who are culturally competent and incorporate traditional AI healing into their health care.

Access. All participants said that health care access was important for receiving health care information and practicing safe sex. Girls in this study believed that health care access was necessary for good sexual health. A 17 year old sexually active participant said, "Having access to health care makes it easier to have safe sex...They [the doctors] could help me, teach me, have the doctors tell how to practice safe sex." Another 17 year old who was also sexually active believed that having low cost, accessible services was a necessity for good health. She explained:

Because people without health care they kind of feel like they have to pay for everything, so it's like what's the point. And then people like me, and I know I can get in for free so it's like I know I can go get a birth control shot for free every three months. So I know I can get it, so why not use it to my advantage?

Many participants felt that having a health care center to go to when they needed birth control or condoms was a reason they practiced safe sex. When a 17 year old sexually active participant was asked whether she would be safe if she did not have health care access, she replied that she did not think she would have safe sex if the American Indian health care center she received care from did not exist. This was in part due to the low cost services as well as various transportation methods to get to the center including bus, taxi, and shuttle service arranged by the health care clinic.

Other participants receiving care at the American Indian health care center agreed that the center made health care accessible by allowing for same day

appointments and walk-ins as well as by accepting many insurance providers, including Medicaid. These money/insurance issues arose with multiple participants. The participants overwhelmingly agreed that receiving health care at low cost or no cost was critical in their decisions regarding health care, particularly sexual health.

Although many of the participants in the study sought health care at the American Indian health center, others received care elsewhere. One participant, age 16 and sexually active, felt that another clinic, Planned Parenthood, was critical for her sexual health. She said, “[Planned Parenthood] lets you kind of make your own appointments and stuff and I feel more independent.” Another participant, age 18 and not sexually active, thought that the university health care providers at her college were the easiest to access. She particularly enjoyed knowing that services she received would be confidential and not reported to her parents. Participants valued health care clinics that made appointment scheduling easy, were accessible by multiple forms of transit (e.g., buses, cars, shuttle service availability), and respected each girls’ right to privacy.

Health care emerged as a way for young AI women to access services and get additional information about safe sex and reproduction. Most of the young urban AI girls in this study trust their health care provider and feel comfortable accessing services. Yet, this comfort is particularly noticeable in young women who accessed services from a health care center sensitive to American Indian culture. Adolescent AI girls prefer to seek health care services

from service providers that are trustworthy, accessible, affordable, and culturally competent.

The mesosystem was influential on the sexual behavior of the urban AI adolescent girls in this study. Messages, both discouraging and encouraging sex, from the family, friends, neighborhood, school, media, and health care structures influenced sexual behavior. Participants reported family and friend influence as most influential on their sexual behavior. The neighborhood, school, media, and health care also influenced their sexual behavior. Those who received messages discouraging sex from the mesosystem structures were more likely to abstain from sex or practice safe sex. Those girls in the study who received messages encouraging sex from the mesosystem structures were more likely to engage in sexual risk behavior.

Macrosystem

The macrosystem influences the sexual behavior of the urban AI girls in this study. Although the participants in this study did not perceive an influence from the macrosystem, the macrosystem was evident in the three themes that emerged: 1) AI culture and history were important to participants; 2) AI cultural identity was critical to how the girls viewed themselves; and 3) federal policy influenced daily lives in the form of state and federal policy towards AIs.

The majority of girls in this study had a strong cultural identity and valued their AI heritage. Culture was clearly embedded in the microsystem concept of cultural identity. Girls valued their heritage and juxtaposed their culture into their individual identity. Similarly, federal policy was also influential although not

perceived as such by girls in this study. Many participants were recipients of Medicaid, education grants, and other entitlements. The larger state and federal policies influenced their ability to receive health care, housing, food, and higher education benefits. Although not viewed by the participants as important in their daily lives, federal policy clearly did influence their daily living.

American Indian culture. The influence of culture on sexual behavior was a significant finding in this grounded theory study in that participants emphatically denied any tribal or cultural precedence that would encourage early childbearing or sexual activity. Yet, culture emerged as something that was important in personal identity even when there was a significant disconnect in the participant's knowledge or participation in tribal events.

Participants did not believe that their tribe or AI culture encouraged early initiation of sex or early child bearing. A 17 year old said, "I don't feel like my culture affects my sex life." An 18 year old agreed and said, "I also feel that my culture it has nothing to do with my sex life." Some believed that in traditional AI society (e.g. prior to colonization and forced removal from historic lands) there was early childbearing by AIs. One 16 year old asserted, "I'm sure back in the old days people had kids young, cause that seems like what people did hundreds of years ago. But that isn't what happens now." A 19 year old agreed, "Historically women in my tribe probably had kids younger. But that was because of the structure of society and the way things used to be done. It's not like that is still the way things are with the Sault."

Tribal teachings about sex were protective for youth. Most believed that their tribe would encourage them to have safe sex or abstain from sex. One 15 year old said that the AI programs she attended always stressed safe sex and abstinence. She felt that if anything, the community leaders wanted young girls to be safe if they had sex. Others related this to the respect AI culture historically had for women and how women needed to protect themselves because of their status within the community. One 16 year old explained, “We try to keep the image of like being strong women and everything like that, and yeah, being sacred, and saving yourself.” Participants believed in the power of AI women and the importance of respecting women because of their power stemming from childbearing and birth.

An 18 year old remarked on how powerful women are within her tribal culture and how important it was to be cognizant of that power, particularly when thinking about sex. She said, “Our tribe...tribes in general have a lot of respect for women. Especially when women are menstruating, they can’t enter sweat lodges...it’s not because they’re being excluded it’s because women are viewed as more powerful.”

American Indian girls in this study believed that their culture discouraged unsafe sex and early child bearing. In addition, many believed that being a strong AI woman was valued and women were considered sacred. There were clear cultural influence in how the participants viewed sex and women within AI culture.

Cultural identity. Cultural identity emerged as a critical component in how participants identified themselves. This identity formation helped the girls in this study determine who they were, and what they wanted to be. Subsequently, this identity influenced their decisions about sexual behavior. Those who identified strongly with being AI reported less sexual risk behavior than those who were not connected to their culture. The majority of participants stated that they were of mixed racial and ethnic heritage. However, most described being American Indian as integral to who they were as individuals.

Most girls in this study felt connected or very connected to their culture. Often AI girls in this study felt connected to their culture despite feeling disengaged. A 17 year old participant said, “It’s really weird because I feel like really connected to my Native culture but I’m not necessarily a part of it, so I don’t know why I feel so connected.” Another participant, age 16 said, “I say I’m Native because I think that’s basically what I am. I know some languages and some other culture and stuff.” She continued by saying that in her family, “we pass on food for the most part and like going to pow-wows and just doing the family thing.”

Participants believed that their family influenced their knowledge about AI culture and their connectedness to their AI culture. A 15 year old participant who reported being multiracial said her grandmother was influential in her cultural knowledge and she felt very connected to AI culture. When asked about her identity she said that she feels comfortable saying she is “Indian and Mexican” although most people just “assume that I’m Mexican.” Another participant, age

18, was American Indian and Caucasian felt that she was AI, rather than Caucasian. She retold a story from her childhood where she attended an event for a friend who was Korean. When she came home from the event, she told her dad, a non-Native, that she was one of only four or five people at the party who was “White.” Her dad countered by saying, “You mean one of only four or five non-Koreans?” This event helped the participant understand that her AI culture was imperative to who she was. She said, “I understood that he meant you’re not White...I always identified as Native American, but I hadn’t really thought about that like viewed myself as Native American...I think now I think of myself as Native American.”

Although most girls felt connected to the AI culture, three did not. Three participants described themselves as not very connected and one as not connected at all to AI culture although they still identified as AI. Some believed that spirituality was essential in feeling connected to AI culture. A 15 year old participant said, “I’m just not like as spiritually connected as they are.” Others identified primarily with other racial groups. For example, a 16 year old said, “I don’t feel any connection...I say I’m just Mexican/Puerto Rican” and a 18 year old said, “I grew up around Black people, so it’s different, I don’t really have a close connection.” However, all three participants said they would be interested in learning more about their culture and that being AI was still important to how they identified.

Urban AI girls are often multi-racial and identify as such. Most participants had at least two different racial groups that they identified as, although some had

three. Participants often made decisions regarding how they identified based upon what helped them to fit in their environment. Some participants felt that their lives would be less stressful if they identified with the majority group in their environment. Yet, they still identified as AI. It is important to remember that although some urban based AIs present themselves as other racial groups, they still believe that they are AI and prefer to be recognized as such.

What makes you American Indian? One theme that arose during the interviews related to cultural identity was the issue of what qualifies, or makes one eligible to claim AI lineage. Some participants had no knowledge of their tribe or history while others were well versed in the subject. Participants were asked to explain what being American Indian meant and whether there were differences between urban AIs and reservation AIs.

Blood quantum, tribal membership, and physical geographic location were viewed by most participants as historical maladies. Participants felt overwhelmingly that blood quantum and tribal enrollment/membership did not define one as an American Indian. Participants felt that being connected to culture was personal to each individual. This connection and identification as an American Indian influenced who the participants were and how they behaved, including sexual behavior.

A 19 year old participant lamented about how the federal government divided tribal nations and devalued tribal membership by forcing the blood quantum rule onto the AI community. To this participant, the quantification of “Nativity” has hurt the population. This participant thought that racial identity

was what the individual felt it was. Therefore, identifying as AI was what mattered, regardless of enrollment as a tribal member or connection to their tribe.

She explained blood quantum by saying:

I heard an elder say once that blood quantum basically the government came up with blood quantum, that wasn't our thing that we came up with. And I think a lot of it is motivated by money or these identity issues and people judging each other because they want benefits from the tribes or there are certain tuition waivers or whatever. And I also heard somebody say once that like the people that are judging other people about blood quantum, it's because they have more identity issues of their own, which I guess I could see that would make sense.

Participants felt that being American Indian was a state of mind and was not related to tribal membership. Identifying as AI was up to the individual and irrespective of blood quantum or membership status. An 18 year old said, "You don't need a card to tell you that you're Native American, because you know who your family are, you know how many percent. You know, you still are Native American." She continued by saying, "if you're like half or like 25 percent, that don't mean that you're not Indian, you know you can't go to pow-wows. You can still do all the stuff. Like the card don't mean nothing." When asked about those who are not culturally connected but still say they are American Indian, she replied, "They're still Native American inside." Another 18 year old whose grandmother and father were tribally enrolled said that her family members who were enrolled were more Native "by blood quantum, but not by anything else. I

think we're all the same." An 18 year old participant said "even though I don't know nothing about being Indian, it's still like a part of me, you know?"

Participants also believed that identifying as an American Indian helped adolescent AIs reclaim their culture after generations of negative connotations being associated with being AI. Many remarked that their parents and grandparents were ashamed to be AI, but now it is socially acceptable to be AI; in fact, it is often deemed "interesting" and "cool." An 18 year old said:

I guess like the things that I've noticed when I've been with other Native people, It's just something, like you're reclaiming it...Like 'this is who I am.' ...like, 'you can't take it away from me anymore...I'm saying I'm this.'

Participants also felt that being American Indian involved unfair standards not found in other races. Most felt that only AIs were held to a higher standard of justifying "how much" they were. Being American Indian to the participants was about how one felt about their identity, yet most felt that society had different standards about what being AI actually meant. A 17 year old agreed that being American Indian was about how you identified and called the blood quantum system "mean." She felt frustrated by the system and remarked that if someone says they are African American, no one ever questions them on "how much African" they are. She felt that even those who did not participate in cultural events were AI who "just don't express it, embrace it."

Others believed that being forced to justify your blood quantum to others was hurtful and disrespectful. A 16 year old felt that she was constantly asked to justify her AI status and stated:

Some kid asked me how much Native American I was and said, 'Oh you're not enough.' I don't know, I was like 'What's that supposed to mean?' 'cause I didn't look Native American and all that but...I do get asked all of the time how much I am."

She remarked that when people question her about "how much" she is it makes her "feel like I'm lying, like, I'm an idiot or trying to fool them into something. I don't know, it's weird."

Cultural identity differences between urban AI adolescents and reservation AI adolescents were denied by participants. Most felt that those living in urban areas were "just as Indian as those living on the reservation." A 16 year old said that people who live on reservations "probably do more stuff with their tribes and stuff" but that she felt just as "Indian" as them. Another participant, age 18 said that those on a reservation "probably think so [that they are more Native] but I don't think they are." Similarly, a 17 year old participant had family members who lived on the reservation. She stated, "Like my cousin thinks she's more Indian than us...She lives on the reserve...but I don't think she is." She continued to say that American Indians living in urban areas and those living on reservations "were equal."

This grounded theory revealed that cultural heritage in urban American Indian adolescent girls is strong despite mixed racial ethnicities, lack of knowledge about their culture or tribe, and even messages from the larger governmental structure that they are not "Indian enough." In general, being American Indian was a significant part of participant's identity and factored into

how they saw themselves. Although participants did not perceive a link between their cultural knowledge and sexual behavior, it was obvious that culture was an important component in how they viewed themselves and how they viewed others. This identity formation allowed the girls to make choices about sexual behavior consistent with the identity they developed. Being AI was significant to how each girl viewed their environment and how they negotiated their daily activities.

Federal policy. Federal and state level policy influenced the daily lives of participants. The majority of the participants or their family members were eligible for various entitlement programs (e.g. subsidized meals, Medicaid, bridge card). These programs helped shelter, feed, and provide health care for the participants. In addition, policies related to sex education programs clearly influenced each girl. The majority of girls in this study believed that their school based sex education programs were inadequate. These programs are a direct result of the state and federal policies and influenced knowledge about sexual behavior. However, the participants in this study did not perceive an influence from the federal government's policy on their sexual behavior despite a daily influence on most of their lives.

Although federal policy clearly affected AI services (e.g. tribal health care, blood quantum, federal recognition of tribes) and the environment they lived in (e.g., food availability, health care, school education), adolescents were unable to see the link between policy and their own personal lives. Participants were asked about their own perception of the government's effect on their daily lives

and more specifically their sexual behavior. They answered with, “I don’t know,” “That doesn’t affect me,” and “There is no relationship.” A connection between federal policy and personal behavior, including sexual behavior, exists. However, the extent of influence is unknown at this time.

Framing Sexual Behavior Summary

In this study, the grounded theory that emerged was consistent with and adapted from Bronfenbrenner’s ecological model. Framing sexual behavior is the social and structural processes which influenced the urban AI girls’ sexual risk behavior. This process involved interpretation of sexual risk behavior messages from the microsystem, mesosystem, and macrosystem that influenced their behavior. (See Figure 4). The social and structural processes is experienced and negotiated in the microsystem, mesosystem, and macrosystem.. The microsystem, including long term goals, identification of being a normal teenager, and cultural identity helped participants form an identity that allowed them to make choices about sexual behavior consistent with the identity they developed. The mesosystem included family, friends, neighborhood, school, media, and health care. The messages that girls in this study received from these structural influences either discouraged or encouraged sexual behavior. Family and friends were reported as most influential on sexual behavior with neighborhood, school, media, and health care influences also reported as influential. The macrosystem, including culture and federal policy were influential on the daily lives of participants in this study. The daily influence of higher policy decisions influenced the environment AI girls lived in.

Summary

All adolescents in this study are exposed to messages about sexual behavior from various social and structural systems in their environment. Some in the study abstained from sexual activity while others engaged in sexual activity. The girls in the study cited family, friends, their environment (including their neighborhood, school, and the mass media), and health care services as important influences in their decisions about sexual behavior. Family influence, particularly the influence of female family members, was most significant in adolescent's decisions about sexual behavior. Participants felt that family members were constantly relaying messages about sexual activity, safe sex and appropriate behaviors. Finally, AI culture was an important part of participants' identity. Girls in this study had very strong ideas about American Indian culture and what being "American Indian" meant for the individual and to the community which influenced sexual risk behavior through a recognition of what being a strong AI woman meant and a belief that culture does not promote sexual risk behavior

In the following chapter, a summary of the results, implications for practice and research as well as recommendations for future research will be presented. Practice recommendations will focus on health care providers who practice in urban areas. Research recommendations will include next steps for future exploratory and culturally relevant research.

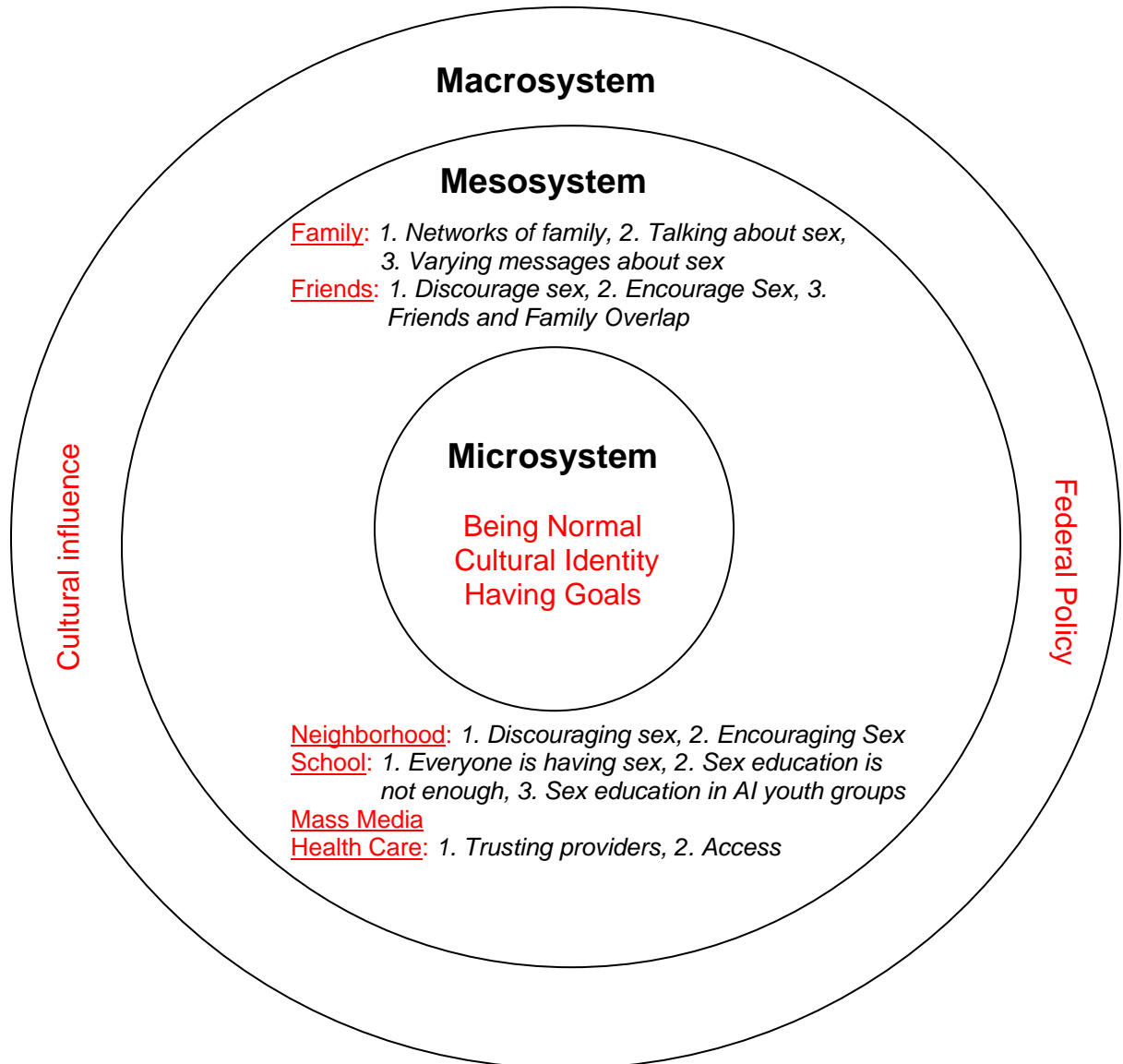


Figure 4. Framing Sexual Risk Behavior: A Grounded Theory of Urban AI Adolescent Girls' Sexual Risk Behavior. (An adaptation of Bronfenbrenner's ecological model.)

Table 1

Demographic Information

Variables (N=20)

Age	
Mean age (years)	17.05
Range	15-19
Parent income	
No parental support	1 (5.0%)
<\$9,999	4 (20.0%)
\$10,000-\$24,999	2 (10.0%)
\$25,000-\$49,999	2 (10.0%)
\$50,000-\$74,999	0 (0.0%)
>\$75,000	2 (10.0%)
Do not know	9 (45.0%)
Employment*	
Student	18 (90.0%)
Part-time work	2 (10.0%)
Full-time work	0 (0.0%)
Unemployed	2 (10.0%)
Living situation	
Lived alone	2 (10.0%)
Lived with parents	14 (70.0%)
Lived with other family	1 (5.0%)
Legal guardian	1 (5.0%)
Lived with partner	2 (10.0%)
Education	
6 th -8 th grade	1 (5.0%)
9 th grade	1 (5.0%)
10 th grade	5 (25.0%)
11 th grade	5 (25.0%)
12 th grade/HS grad	5 (25.0%)
Some college	2 (10.0%)
GED	1 (5.0%)
Subsidized lunch	
Yes	12 (60.0%)
No	7 (35.0%)
Did not answer	1 (5.0%)
Health insurance	
Medicaid	13 (65.0%)
Private	2 (10.0%)
None	2 (10.0%)
Unknown	3 (15.0%)

* Participants were able to mark more than one response

Table 2

Tribal Affiliation

Variables (N=20)

Tribal Affiliation*	
Apache	1
Blackfoot	1
Chickahominy	2
Delaware	1
Lumbee	2
Mohawk	1
Ojibwe (3 Fires)	4
Little Traverse	
Bay Band	2
Sault Ste. Marie	3
Odawa/Ottawa (3 Fires)	3
Oneida	2
Pottawatomini (3 Fires)	2
Unknown	1

* Participants were able to list multiple tribal affiliations

Table 3

*Sexual Behavior**

Variables (N=20)

Oral sex	5 (25.0 %)
Vaginal sex	10 (50.0%)
Anal sex	0 (0.0%)
Condoms (100%)	3 (15.0%)
Intercourse without contraception	7 (35.0%)
Depo provera	1 (5.0%)
Lifetime partners	
0 partners	9 (45.0%)
1-2 partners	5 (25.0%)
3-5 partners	3 (15.0%)
6-10 partners	3 (15.0%)

*Average age of those sexually active was 16.9.

Average age of those not sexually active was 17.2.

Table 4

Risk Behaviors

Variables	Girls (N=20)
Cigarette use	6 (30.0%)
Alcohol use	12 (60.0%)
Marijuana use	7 (35.0%)
Other drug use*	2 (10.0%)
Fighting	1 (5.0%)
Cutting	6 (30.0%)
Eating disorders	2 (10.0%)
Total risk behaviors	
0 risk behaviors	1 (5.0%)
1 risk behavior	8 (40.0%)
2 risk behaviors	7 (35.0%)
3 risk behaviors	3 (15.0%)
4 risk behaviors	1 (5.0%)

* Includes acid and ecstasy.

Table 5

Living Situation

Variables (N=20)

Single parent home	11 (55.0 %)
Two parent home	3 (15.0%)
Other family	1 (5.0%)
Partner	2 (10.0%)
College dormitory	2 (10.0%)
Legal guardian	1 (5.0%)

Table 6

Negative Events

Variables (N=20)

Family death*	8 (40.0%)
Other death	2 (10.0%)
Moved	2 (10.0%)
Parents' divorce	3 (15.0%)
Domestic violence	3 (15.0%)
Rape	1 (5.0%)
Abortion	2 (10.0%)
Miscarriage	1 (5.0%)
Failed grade	2 (10.0%)
Financial issues	1 (5.0%)
Sick family member	1 (5.0%)
Changed school	2 (10.0%)
Total negative events	
1 negative event	15 (75.0%)
2 negative events	5 (25.0%)

* Four participants had 1 family member die, two had 2 family members die, and two had three family members die

Table 7

Goals

Variables (N=20)

College (4 or 2 year)*	7 (35.0%)
Finish high school*	4 (20.0%)
Graduate college	2 (10.0%)
Honor roll	1 (5.0%)
Get a job	2 (10.0%)
Model/dance	1 (5.0%)
Go abroad*	1 (5.0%)
Pass current grade	1 (5.0%)
No goals	5 (25.0%)

* Denotes categories where participants chose 2 goals

CHAPTER V

Summary and Recommendations

Framing Sexual Risk Behavior Summary

Framing sexual risk behavior is the social and structural processes which influenced the urban AI girls' sexual risk behavior. This process involved interpretation of sexual risk behavior messages from the microsystem, mesosystem, and macrosystem that influenced their behavior. The urban American Indian adolescent girls in this study received messages, both positive and negative, about sexual behavior from social and structural influences. These messages influence how the adolescent reacts to and negotiates their own sexual behavior. Similar to studies with other racial groups, the urban AI adolescent population's influences are consistent with Bronfenbrenner's ecological model (Heinrich et al., 2006; Small & Luster, 1994). In this study, some relationships and structural influences were reported more often than others. Family and friends had the most influence on sexual behavior and neighborhood, school, media, and health care were influential, but to a lesser degree. Similarly, cultural identity, long term goals, and feelings of being a normal teen influenced sexual behavior. Finally, although not perceived as an influence by participants, culture and federal policy influenced the daily activities of the participants as well as their cultural identity which in turn shaped sexual behavior.

The differences that emerged in this study between urban American Indian girls and other populations were related to cultural and relationship structural influences. Urban American Indian adolescent girls often are multi-racial and feel misidentified as other races. However, despite the labels placed upon them by society, they strongly identify as American Indian and feel that their sense of Native identity is equal to that of those living on reservations. In addition, AI girls have strong relationships with their family members, in particular they all had at least one female family member to talk to about sex.

Prior research with African Americans, Caucasians, and Hispanics supports the importance of family and friends' influence on the urban AI adolescent girls' sexual risk behavior. Previous studies found that adolescents with warm, communicative parenting and friendship groups that engage in prosocial behaviors were more likely to avoid risk behaviors (Heinrich et al., 2006; Kelly & Morgan-Kidd, 2001; Ream & Savin-Williams, 2005; Wills et al., 2004).

In this study, all the participants believed that the messages they received from family members had the greatest influence on their sexual risk behavior. Girls in this study reported that having a network of family members, particularly a female family member to talk to about sex, influenced their sexual behavior. However, even though the AI participants had family members to speak to about sex, they often receive mixed messages. Older generations stressed primarily abstinence; whereas younger generations often conveyed two types of messages: those encouraging sexual behavior or those discouraging sexual risk

behavior. Consistent with the National Campaign to Prevent Teen and Unplanned Pregnancy, family support is imperative in preventing adolescents from engaging in sexual activity and parents should never “underestimate the great need that children feel — at all ages — for a warm relationship with their parents and for their parents’ guidance, approval, and support” (Albert, 2009; NCPTUP, 2008b, p.26).

Friends were also the source of mixed messages. Similar to previous studies with other racial groups, friends both encouraged and discouraged sexual behavior (Brown et al., 1992; Bryant & Zimmerman, 2002; Kotchick et al., 2001; Romer et al., 1994). Girls in this study cited their friends as influences on their sexual behavior. Those who were sexually active and/or did not practice safe sex believed that having friends who were having sex as well as feeling pressure from boys influenced their sexual behavior. Similarly, those who abstained from sex or were consistently practicing safe sex cited their friends as encouraging abstinence, respectful of their beliefs, or promoting safe sex behavior.

Neighborhoods, schools, and the media were important structural influences on sexual risk behavior. Previous studies of urban neighborhoods found that young women’s sexual behavior is influenced by their neighborhood, those living within their neighborhood, and the normative behaviors of the neighborhood (Baumer & South, 2001; Browning et al., 2008; Chen et al., 2010; Cubbin et al., 2005; Duncan et al., 2003; Kim, 2010). Similarly, studies of school achievement and sexual risk behaviors have previously found that adolescents who attend school regularly, feel connected to their school, achieve a high GPA

and are satisfied with their school environment are less likely to initiate sexual activity, have multiple sexual partners, and abstain from sexual risk behavior (Chen et al., 2010; Resnick et al., 1997). Finally, L'Engle, Brown & Kenneavy (2006) found, "Adolescents who are exposed to more sexual content in the media, and who perceive greater support from the media for teen sexual behavior, report greater intentions to engage in sexual intercourse and more sexual activity" (p. 186).

In this study, adolescents stated that their neighborhood, school, and media messages influenced their sexual behavior. Similar to other racial groups, the participants felt that the community they lived in, which includes the neighborhood and school, influenced their own value system (Brewster, 1994; Moore & Chase-Lansdale, 2001). Those whose communities were described as conservative or safe by participants tended to abstain from sex or practice safe sex. Conversely, those who felt that their neighborhood or school was unsafe or promoted adolescents to have sex were more likely to engage in sexual risk behavior.

Yet, even with the messages from the neighborhood and school varying amongst the participants, all the girls in this study were exposed to similar media messages, particularly MTV reality show, and many believed that these messages influenced adolescent behavior. In fact, many of the girls stated that the inability to distinguish reality TV from real life made it difficult for adolescents to fully understand the consequences of sexual behavior. The media messages lead young girls to believe that sexual risks were minimal and that the

consequences minor. In fact, participants believed that portraying young girls having babies or normalizing sex for teens influenced young women to have sex.

Although the family, peers, and the environment were significant influences on sexual risk behavior, health care emerged as imperative to promoting safe sex and providing education to adolescents. Adolescents believed that health care access, as well as provider trust were important influences on sexual behavior. There is significant evidence that American Indians have a greater mistrust of the medical system compared to their White counterparts (Guadagnolo et al., 2009). Previous studies have shown that American Indians who have a negative experience with a health care provider, whether it is a cultural mismatch or negative perception regarding care, had a greater mistrust of the larger health care system (Buchwald et al., 2006; Hunt et al., 2005). In addition, those in urban areas often have increased difficulty receiving Indian Health Service care that is guaranteed to members of federally recognized tribes, have difficulty obtaining services due to not qualifying for tribal enrollment, or are members of tribes that are not federally recognized (Katz, 2004; Lillie-Blanton & Roubideaux, 2005).

This grounded theory study found that urban adolescent AI girls trust their health care providers and trust medicine. Although some experienced negative experiences with providers, most believed that the goal of the health care provider was to offer health education and provide ways for the adolescent to protect themselves. However, accessing health care is often a barrier to practicing safe sex or accessing information about safe sexual behavior. Those

who were able to receive low cost medical treatment from culturally competent providers were more likely to praise the health care system. Similarly, those who were able to easily schedule appointments, find transportation to the center, and believed that the services they received were affordable or free, reported being happier with their health care services.

Finally, culture and federal policy influence sexual behavior. Cultural awareness and knowledge of tribal expectations influenced the girls' sexual behavior. Girls in this study did not believe there was a cultural expectation for early child bearing or sexual initiation. Therefore, pressure from the cultural macrosystem was not present. However, culture did influence how participants identified. This cultural identity in turn influenced how the girls saw themselves and this perception of who they were and what they wanted to become influenced sexual behavior. In addition, most of the girls were from inner-city, high poverty areas and were eligible for government assistance in the form of subsidized lunch, Medicaid, food stamps, etc. Subsequently, all the girls in the study were recipients of sex education in public schools that were reflective of current state and federal policies. These policy programs influenced each girl's daily life but were not perceived by the adolescents in this study as an influence on sexual behavior. However, girls, particularly those who practiced safe sex or abstinence, often pointed to the unsafe neighborhoods they lived in or their parents' lack of education and money as a rationale for abstaining from sexual activity or for practicing safe sex. They also cited health care, often provided by federal and state programs, as the reason they were able to practice safe sex.

The low-income, low education environment where the girls often lived was a result of many of the policies in place by the federal and state government. Culture and federal policy did consistently influence AI adolescent girls in this study.

Consistent with Bronfenbrenner's ecological model, AI adolescent girls in this study are influenced by their microsystem, mesosystem, and macrosystem. The urban AI adolescent participants receive messages about sexual behavior that are both positive and negative from social and structural systems. These messages are processed by the individual in the context of the microsystem, mesosystem, and macrosystem. The choices that are made about sexual risk behavior are dependent on the messages they are receiving and the ecological system the individual is living within.

The current model would effectively replace other models that have been developed for the AI population such as Kaufman et al. (2007) and Lowe (2002). While there are similarities between the models, such as the importance of culture on AI youth, the role of peer pressure, and the significance of goals in the lives of young people, there are distinct differences between the new model and the others. Kaufman et al.'s model of sexual health in AI youth presupposes historical trauma, discrimination, and traumatic life events. Lowe's Cherokee Self-Reliance model is specific to Cherokee nation members in rural areas who are male. The current grounded theory model does not make past trauma a prerequisite for risk behavior and is not limited to a single tribe. In addition, the current model was developed for the urban AI girl population and therefore it is

not necessary to use models developed for the rural/reservation population. The grounded theory model is an important step toward recognizing that the AI population is unique and that there are differences between those living in urban areas and those living in rural areas.

Recommendations

Recommendations for Nursing Practice

Nursing practice should focus on understanding the urban AI adolescent girl's influences for sexual behavior. Nurses, particularly advanced practice nurses (APN), can focus on three main areas to help reduce sexual risk behavior in the population and provide culturally competent care. The three areas APNs should focus on are teen-provider interactions, assessment, and the clinic environment. For teen-provider interactions, there are three ways to improve nursing practice: 1) Ask open questions about sex to the adolescent; 2) Discuss popular TV shows that might influence behavior; and 3) Encourage adolescents to set goals and help the girls make plans on how to achieve the goal. To improve assessment, APNS should: 1) Assess the adolescent's family structure and relationships; 2) Inquire about friend relationships and normal behavior within the friendship group; and 3) Ask specific questions about the adolescent's neighborhood and school. Finally, to optimize the clinic environment for AI adolescent girls, APNs should: 1) Provide a warm, trusting environment for AIs to access health care; and 2) Ensure cultural competency (e.g. take time to learn about AI tribes, customs and beliefs).

First and foremost, it is vital that nurses and APNs ask questions about sexual behavior. As a provider, sexual health assessment is a critical piece of the health and physical well-being of the adolescent (Killebrew & Garofolo, 2002). It is imperative that the provider creates a warm environment where the adolescent feels safe to answer questions about sex openly and honestly. Girls in this study reported positive provider relationships when the provider was comfortable asking questions about sex, replied honestly to questions asked about sex, and supported each individual's autonomy.

Next, it is important to assess the family, friend, and other structural influences on sexual behavior. Using the event history calendar provided valuable information from the adolescent that would not have been elicited otherwise. In this study, the majority of the adolescents believed that the event history calendar was easy to complete and would be an acceptable way to report health information to a provider prior to a health care visit. Every participant stated that if their health care provider asked them to complete the form, they would, and most of the participants enjoyed completing the event history calendar. The event history calendar serves as an efficient way for adolescents to self-report on their life and variables influencing their life. Information about where the adolescent lives, who they live with, who their important friends and family members are, their school grade, and negative and positive events are quickly accessible and easy to expand on with simple follow up questions by the provider.

Using the event history calendar during research helped access important health information and would be useful in the clinical setting. The event history calendar also served as a means to identify long term goals. The final column of the calendar is devoted to outlining specific goals in each category. Therefore, providers can quickly view the goals of their patients and discuss these goals with the adolescent. By discussing the goals, the provider can put the teen's health into the context of their goals and discuss ways the adolescent can meet their goals through health means. For instance, if an adolescent reports going to college as a goal but has multiple risk behaviors and sexual partners, the health care provider could encourage safe sex or abstinence as well as cessation of risk behaviors. The provider can also offer health care services to the patient to aid her goal achievement. This use of the calendar to identify the adolescent's priorities and develop health care measures to help her achieve the goals is an integral part of being a trusted health care provider.

In addition, the event history calendar covers a wide array of lifestyle behaviors including other risk behaviors and after school activities. However, it does not ask about media exposure. Therefore, it would be prudent for providers to ask about media exposure and ask the adolescent questions about their beliefs towards the programming. This will enable the provider to have a better understanding of how the adolescent views the program and discuss the shows' message. From these discussions, providers can clear up misconceptions by the teen or provide further information on sexual risk behavior and safe sex.

Finally, the provider must always consider culture when caring for someone of a different racial or ethnic group. This is important particularly for those providers caring for American Indians in urban areas because this group is heterogeneous and cultural connectedness, knowledge, and traditions vary amongst people. Therefore, providers must first ask the adolescent about their own values and beliefs. It is imperative to ask the urban AI teen how they identify, how they view health care, and if they have any questions or concerns at the visit. It is also important for the provider to clarify their own knowledge on the culture and provide parameters for care. For example, if the adolescent prefers traditional healing methods be used in conjunction with their medical care, it would be important for the provider to clarify this expectation and also provide the teen with the limits of their ability to accommodate. This will ensure that the adolescent feels respected and valued but that the provider is also able to work within the confines of their scope of practice.

It is important for providers working with American Indian adolescents to consider the adolescent's social and structural surroundings. Their relationships and environment can influence sexual behavior. It is important to take time with patients to not only evaluate their health, but evaluate those external influences that impact health. Health care providers must strive to be culturally sensitive and responsive to the needs of the population in order to decrease sexual risk behaviors and improve the health and well-being of the population.

Nurses and APNs must be cognizant of the population they are working with at all times. When working with AI adolescent girls, it is important to ask

questions about sex, assess the adolescent's social and structural influences, and be culturally competent. Urban AI girls in this study trusted their health care providers and would be willing to share personal information with them. However, they expect to be treated with respect and given autonomy over their health care decisions.

Future Research

This grounded theory could be useful for planning future research. The current literature on urban AI adolescent sexual risk behavior is limited; therefore, using the results of this grounded theory to investigate known influences in sexual risk behavior could be important to the health of the urban AI adolescent girl population. The findings of this study indicate that urban AI adolescent girls are influenced by family, friends, neighborhood, school, media, health care, personal goals, cultural identity, and by culture and policy. Further investigation into each finding is important in order to understand the strength of the influence.

First, more research is needed on the urban adolescent AI girl's family relationships and beliefs about the family. All of the adolescents stated that family, both immediate and extended, was the most important influence in their sexual behavior. Parental relationships should be examined in the population. Previous studies done with mother-daughter dyads as well as father-daughter dyads should be considered for replication in order to determine how the AI population compares with other racial groups within the United States (DiClemente et al., 2001; Hutchinson & Montgomery, 2007; Kao et al., 2010). Subsequently, other relationships with family members, particularly female family

members (e.g. grandmothers, aunts, sisters, cousins) should be evaluated to determine how non-parental family members influence sexual behavior. Future research should focus on identifying the strengths of the female AI relationship and determining ways to utilize the relationship for the promotion of safe sex behaviors.

Preliminary results show that family interventions would be a possible avenue for reducing sexual risk behavior in AI girls. Family interventions could include the adolescent and their parent or family member they most feel comfortable talking to about sex. The intervention could include sex education courses for the adolescent and their family member, parenting/mentoring education courses for the family member, and sessions to improve communication between the adolescent and the family member. However, prior to the development of an intervention, it is imperative to determine which family relationships are most influential on sexual risk behavior.

Second, friend relationships and environmental factors should be examined more thoroughly. Friend relationships should be evaluated in conjunction with the family as one of the findings of this study included an overlap between family members and friends. In addition, urban AI girls are part of mixed race friendship groups. Therefore, identifying the predominant themes and belief systems that emerge in the friendship groups could be important to future work with the population.

Subsequently, the neighborhood, school, media, and health care should be evaluated further to determine the strengths or weaknesses of the

relationships between these variables and sexual behavior. The current study found that AI youth groups were considered ideal places to learn about safe sex behaviors. Therefore, implementing safe sex education intervention programs at AI community centers could help decrease sexual risk behavior. In addition, studying AI neighborhood and school environments could provide additional information on how the environment is influencing sexual risk behavior in adolescent AI girls.

Future research should also focus on the male adolescent as well as comparison of urban AI adolescents to reservation AI adolescents. Replication of the current study on reservations could confirm any similarities or differences between the two groups. Similarly, replicating the study with male adolescents could provide valuable insight into how adolescent AI boys regard sexual behavior and what they believe to be the primary influences on sexual behavior.

Although there is significant investigative work to be done, it would be premature to consider detailed plans for interventions at this stage of the inquiry. What we do know from this study is that urban AI adolescent girls value their cultural heritage and identity and appreciate working with clinicians and researchers who are culturally competent and sensitive. It was also determined that urban AI adolescent girls believe their family and friends as well as the structural influences of the neighborhood, school, media, and health care influence their sexual risk behavior. These variables need further exploration before an intervention could be developed.

Strengths

There were many strengths to the current study. First, a major strength was the grounded theory methodology used for the study. Due to the limited amount of information available on urban AI adolescent girl sexual risk behavior, a grounded theory method allowed for information to be discovered that would not have emerged without a method that allowed for openness to the data.

A second strength was the use of the event history calendar. By using the calendar to collect data, the PI was able to gain valuable information from each participant about their life context. This information provided additional perspective on the participants and their lives. Finally, this study was unique in that the data collected allowed for individual and group analysis. The individual participant data worked in conjunction with the group data collected in the interviews and talking circles. It provided rich individual and social/structural data that strengthens the results.

The final strength for this study were the multiple layers of data analysis that occurred. In addition to traditional grounded theory analysis set forth by Glaser, the data was reviewed by members of the AI community as well as faculty members who were familiar with AI and adolescent research. This additional layer of analysis provided colleague validation and assurance of cultural sensitivity and appropriateness.

Limitations

There were two limitations to this study. The first limitation was the inability to quantitatively generalize the results from this study to the larger urban AI adolescent girl population. Data for this study was collected in southern

Michigan. Most of the participants reported being affiliated with a Three Fires tribe, tribes traditionally located within the Midwestern region of the United States. Therefore, it is unclear whether the results from this study can be generalized to other urban populations in areas outside of the Midwestern United States.

The second limitation to this study was related to recruitment of participants. The majority of the participants were connected with and recruited from their area's AI community center. Therefore, it is unclear whether these results would be applicable to AI adolescent girls who are not involved in their community AI center or have minimal connection to their cultural heritage.

Conclusion

Framing sexual risk behavior is the social and structural processes which influenced the urban AI girls' sexual risk behavior. This process involved interpretation of sexual risk behavior messages from the microsystem, mesosystem, and macrosystem that influenced their behavior. Urban American Indian adolescent girls' sexual behavior is influenced by social and structural systems consistent with Bronfenbrenner's ecological model. There are many similarities between urban adolescent AI girls and urban adolescent girls from other racial and ethnic groups. In both populations, sexual behavior is influenced by the adolescent's family, friends, neighborhood, school, media, health care, long term goals, and federal policy.

However, distinct differences are present in terms of the family structure and relationships within the family as well as related to culture and cultural

identity. Subsequently, while other populations are subject to the policies of the federal and state governments, the AI population in particular has a distinct history of oppression that adds an additional layer of uniqueness to the issues they face. However, despite the differences, there are more similarities between urban adolescent AI girls and other urban adolescent populations.

The family, friends, neighborhood, school, media, health care, long term goals, culture, and federal policy influence the choices the girls make regarding sexual behavior. The current lack of research with the urban AI adolescent population makes it necessary to continue exploratory research in order to better understand the population. It is also imperative that practitioners work closely with AI adolescent girls in urban areas to address health promoting behavior to minimize and eliminate sexual risk behavior.

Appendix

Talking Circle/Interview Questions

*Denotes questions added during data collection process

Topic One: First we are going to talk a little about teens and sex. I will ask you some questions about teens having sex, feel free to answer any way you want, or if you feel uncomfortable you do not have to answer the question, you can just pass the shell to the next person.

1. Tell me what you know about having sex.
2. Tell me how you feel about having sex.
3. Tell me what influences you having/not having sex.
4. Tell me who influences you to have/not have sex.

Topic Two: Now we are going to talk about having safe sex (Safe sex is defined as using contraceptives (like birth control) or condoms to prevent getting pregnant or getting a sexually transmitted infection. It also includes making an informed decision about who to have sex with and when.)

5. Tell me what you know about having safe sex like using contraceptives/condoms to prevent getting pregnant or getting a sexually transmitted infection or HIV/AIDS.
6. Tell me how you learned about having safe sex.
7. Tell me how you feel about having safe sex.
8. What influences your decision to have sex?
9. What helps or empowers you to have safe sex or abstain from sex?

Topic Three: Now let's talk about sexually risky behaviors

10. Tell me what you know about sexually risky behaviors.

11. Tell me how you feel about sexually risky behavior?
12. Tell me what and who influences your decision to use or not use contraceptives/condoms during sex?

Topic Four: These questions relate to your family/friends and the idea of sex.

13. What does your family think about safe sex?
14. What does your family tell you about safe sex?
15. What does your family expect you to do about safe sex?
16. How does your family's socioeconomic status (i.e. family income, education, location of housing) influence your having safe or unsafe sex?
17. How do your friends feel about safe sex/tell you about safe sex/expect you to do about safe sex?
18. How does your neighborhood influence your sexual behavior?*
19. How does your school influence your sexual behavior?*
20. What do they tell you in school about sex?*

Topic Five: These questions are about tribal and cultural influences and safe and unsafe sex.

21. Can you tell me about the history of your tribe/culture?
22. What type of cultural/Indian events do you participate in?*
23. How often do you participate in cultural events?*
24. How connected do you feel to your culture/tribe?*
25. Is there any history in your culture of women having sex young? What is the history?

26. How do you think your tribal affiliation (where you may be enrolled or what you might identify as) influences your safe or unsafe sex?

27. How has your culture influenced your safe or unsafe sex?

28. How do you think your culture influences early pregnancy/childbearing?

Topic Six: These questions are about health care/other services and having sex.

29. How do health care and other services influence your sexual risk behaviors and safe sex?

30. How does access to health care and other services influence your knowledge about sexual risk behaviors and safe sex?

31. Does your health care provider give you information about sex?

32. Do you trust your health care provider?*

Topic Seven: These questions are about your economic status and resources that are available to you.

33. How does the economic status (i.e. tribal money/federal government assistance) of your people influence sexual risk behaviors and safe sex?

34. Are you able to find the resources to follow through with safe sex?

Topic Nine: Wrap up questions

35. What would you tell other adolescents about sexual risk behavior?

36. What would you tell other adolescents about having safe sex?

37. What was the most important thing we talked about today in this talking circle?

38. Is there anything else we did not talk about that you would like to talk about now?

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