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EXPLORING ADOLESCENT DATING VIOLENCE IN RURAL COMMUNITIES:  
A MIXED METHODS STUDY

by

Sarah A. Taylor

A DISSERTATION

Presented to the Faculty of  
The Graduate College at the University of Nebraska  
In Partial Fulfillment of Requirements  
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Major: Human Sciences  
(Child, Youth & Family Studies)

Under the Supervision of Professor Yan Ruth Xia

Lincoln, Nebraska

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EXPLORING ADOLESCENT DATING VIOLENCE IN RURAL COMMUNITIES:  
A MIXED METHODS STUDY

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University of Nebraska, 2018

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Adolescent dating violence (ADV) occurs nearly twice as often among rural adolescents than it does among non-rural adolescents. Research has suggested several reasons for this population difference. First, people in the rural context oftentimes have traditional gender role attitudes towards male dominance over women, which can be displayed in the form of relationship violence. People in the rural context also tend to have less access to friends and resources (e.g., social services), which can further perpetuate violence by limiting a victim's opportunity to seek help. In addition, rural individuals tend to have a reduced sense of anonymity, and thus, victims may be reluctant to seek help for fear that their community will criticize them. Research has examined these rural sociocultural aspects in regards to adult relationship violence, but research on rural ADV has yet to examine these factors. This study uses a concurrent nested mixed methods design where the qualitative phase is embedded in the predominant quantitative phase. The purpose of this study is to understand how aspects of the rural context are associated with attitudes toward and experiences of ADV.

A convenience sample of 208 rural Nebraska adolescents (ages 13-19) was used to answer a survey regarding rural sociocultural aspects and ADV. Quantitative research questions were addressed with structural equation modeling and moderation analyses. The qualitative research question was addressed using content analysis.

Findings reveal that hostile sexist gender role attitudes significantly predict ADV victimization. Benevolent sexist and hostile sexist attitudes are associated with favorable attitudes towards ADV. However, results from structural equation modeling did not provide support for the isolation and anonymity hypotheses. Moreover, participants' parents impact their relationships in a variety of ways. Adolescents learn how individuals should act in relationships through their parents, parents provide social support for relationships to many adolescents, and many adolescents report that their parents are completely aware of their dating behaviors. Nonetheless, many parents reinforced traditional gender roles, provided no social support, and were not aware of their child's relationships. These findings have implications for prevention, intervention, and policy regarding relationship education efforts.

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## CHAPTER 1: INTRODUCTION

Intimate partner violence (IPV) is a pervasive problem that can leave victims feeling powerless and isolated. IPV is defined as any physical, sexual, or psychological abuse towards an individual of any gender, race, culture, or economic group (World Health Organization, 2013). Adolescent dating violence (ADV), a specific form of IPV, occurs between partners in a former or current dating relationship and can lead to the disruption of positive physical and psychological development (Centers for Disease Control and Prevention [CDC], 2016a).

Between 10% and 40% of adolescents have experienced physical or sexual dating violence and up to 70% have experienced psychological dating violence (CDC, 2016a; Halpern, Spriggs, Martin, & Kupper, 2009; Kann et al., 2014; Stonard, Bowen, Lawrence, & Price, 2014). Additionally, with recent technological advances, dating aggression through technology has become increasingly prevalent (Draucker & Martsolf, 2010). One in four adolescents report that their current or former partner has harassed them through text messaging, and one in five report that their current or former partner has harassed them through a social media site. Adolescents also report excessive monitoring by partners through technology. Almost 30% report that their partner has text messaged or emailed 10, 20, or 30 times per hour to monitor them (Picard, 2007).

### **Consequences of ADV**

The consequences of ADV are wide-ranging and severe. Physical health consequences include substance use, risky sexual behaviors, problems controlling weight, and physical fighting (Banyard & Cross, 2008; Coker et al., 2000; Silverman, Rai, Mucci, & Hathaway, 2001). Psychological consequences include suicidal thoughts, depression,

and anxiety (Ellis, Crooks, & Wolfe, 2009). In addition, it is common for adolescents who experience dating violence to struggle with their academics, drop out of school, or skip school to avoid their partner (Ball, Rosenbluth, Randolph, & Aoki, 2008). These consequences are consistent among rural and urban victims of ADV (Foshee, Reyes, Gottfredson, Chang, & Ennett, 2013).

Additionally, prevalence rates of ADV increase with age. As adolescents age, their chances of experiencing ADV rises. For instance, between the eighth and ninth grades, ADV prevalence rates increase from 20-32% to 36-48% (Arriaga & Foshee, 2004). Experiencing dating violence during the adolescent years also significantly increases the likelihood that one will experience IPV in adulthood (Exner-Cortens, Eckenrode, & Rothman, 2013), an issue that costs the United States \$6 billion annually in health expenses and lost productivity of victims (Black et al., 2011; Exner-Cortens et al., 2013; CDC, 2003).

### **Rural Context**

Forms of IPV in the rural context tend to be more prevalent and severe compared to IPV in the urban context. For instance, rural perpetrators of IPV are twice as likely to cause severe physical injuries to their victims, as well as to use a weapon on their victims, compared to urban perpetrators (Logan, Shannon, & Walker, 2005; Shannon, Logan, Cole, Medley, 2006). In addition, twice as many rural perpetrators threaten to kill their victims compared to urban perpetrators. Rural victims are also more likely to experience multiple instances of abuse before requesting a protection order compared to urban victims (Logan, Walker, Cole, Ratliff, & Leukefeld, 2003). Similarly, evidence suggests that prevalence rates of ADV are higher in the rural context compared to the urban

context. Some studies report that ADV occurs nearly twice as often among rural adolescents than it does among urban adolescents (Spencer & Bryant, 2000; Vézina & Hébert, 2007).

Research findings have suggested several reasons for higher prevalence rates in the rural context. First, people in the rural context oftentimes have traditional attitudes towards gender roles, which are engrained in beliefs of male dominance over women and can be displayed in the form of IPV (Reitzel-Jaffe & Wolfe, 2001). People in the rural context also tend to have less access to friends and resources (e.g., social services), which can further perpetuate violence by limiting a victim's opportunity to seek help (e.g., Peek-Asa et al., 2011). In addition, rural individuals tend to perceive reduced anonymity, and thus, victims may be reluctant to seek help for fear that their community will criticize them and their relationship (e.g., Pruitt, 2008).

Overall, research has examined these rural sociocultural factors in regards to IPV among adults, but research on rural ADV has yet to examine these factors. Research on ADV has primarily been conducted in urban areas (e.g., Haberyan & Kibler, 2008). Of the existing rural ADV research, most has either occurred in the rural South (McDonell, Ott, & Mitchell, 2010) or has been collected to investigate rates in comparison to urban IPV (Spencer & Bryant, 2000; Vézina & Hébert, 2007). Few, if any, studies have focused on ADV in the rural Midwest. Rural areas are diverse, and research from the rural South should not be generalized to adolescents in the rural Midwest. Given the high ADV prevalence rates in rural areas, severe consequences of ADV, and unique rural context compared to urban areas, the issue of ADV in the rural context warrants further research.

## Purpose Statement

This study aims to understand how aspects of the rural context are associated with attitudes toward and experiences of ADV. This study will examine attitudes toward ADV, as well as experiences of ADV victimization and perpetration. Research has found *attitudes* toward IPV to be related to *experiences* of IPV among adults (Sugarman & Frankel, 1996; Crossman, Stith, & Bender, 1990; Cauffman, Feldman, Arnett, & Jensen, 2000). Findings have been similar among adolescent samples, where supportive attitudes toward ADV have been linked to perpetration and victimization of dating violence in one's own relationship (Ali, Swahn, & Hamburger, 2011; Kinsfogel & Grych, 2004; Reitzel-Jaffe & Wolfe, 2001; Riggs & O'Leary, 1996; Vagi et al., 2013). Even if adolescents have not experienced ADV, supportive attitudes toward ADV may be an indicator that they are at risk for ADV. Therefore, attitudes toward ADV, in addition to perpetration and victimization, were measured to identify youth who are potentially at risk.

The **primary objective** of this study is to better understand how aspects of the rural context are associated with victimization and perpetration of ADV. Many states still do not have mandatory dating violence school curriculum or specific guidelines for addressing the issue, which is concerning considering the high rates of ADV (National Council on State Legislatures, 2016). Findings from this study will contribute to the ADV knowledge base, which may help guide curriculum and delivery methods for ADV intervention and prevention training in rural areas. Overall, the **long-term objective** of this study is to reduce the rates of ADV in rural areas. This mixed methods study will explore the following research questions:

**Quantitative Research Questions:**

*Research Question 1.* How do sociocultural aspects of adolescents' rural context (i.e., gender role attitudes, isolation, anonymity) relate to ADV outcomes (i.e., victimization, perpetration)?

*Research Question 2.* Does the relationship between sociocultural aspects of adolescents' rural context (i.e., gender role attitudes, isolation, anonymity) and ADV outcomes (i.e., victimization, perpetration) depend on participants' gender?

**Qualitative Research Question:**

*Research Question 3.* What are adolescents' perceptions of dating relationships in the rural context?

**Mixed Methods Research Question:**

*Research Question 4.* How do adolescents' perceptions of dating relationships help to explain ADV in the rural context?

**Theoretical Perspectives**

**Human ecological theory.** The Human Ecological Theory posits that a person's various environments influence their development and experiences. This perspective deems human functioning as the interaction between individual characteristics with their different environments (Bronfenbrenner, 1979). The Human Ecological Theory guides this study, as the origins and consequences of IPV are based on interactions at different environmental levels.

Central to the Human Ecological Theory is the "ecosystem." The ecosystem is comprised of the human, their environments, and the interactions between the human and environments (Bubolz & Sontag, 1993). Ecosystems tend to have varying levels of

interaction. Bronfenbrenner (1979) classified the ecosystem into five main levels that influence an individual's development: the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. At the center of the ecological model is the individual. An individual has distinct physical and psychological characteristics that impact interaction with his or her environment. These individual characteristics include gender, age, health, emotions, and abilities. The first level, the microsystem, is the immediate context of an individual's development and involves the closest environments. This level has a direct impact on the individual and includes the family, peer, and school contexts. Second, the mesosystem consists of interactions between microsystem environments. Third, the exosystem consists of an individual's social setting. The exosystem is an environment that impacts the individual, but the individual is not an active participant in that environment, such as social services, community resources, or mass media. Fourth, the macrosystem consists of policies or cultural differences that directly impact society. In return, these macrosystem factors influence the functioning and development of the individual. Finally, the chronosystem crosses all four other levels and represents the time and transitions over the course of a life. The chronosystem includes changes in social and personal circumstances (Bronfenbrenner, 1979; White & Klein, 2008).

All five levels operate as a unit (White & Klein, 2008). The individual interacts with these environmental levels, which influences a person's behavior. Understanding the interactions between individuals and their environments is important when studying forms of IPV. For example, interactions between ecosystem levels impact the quality of relationships between IPV victims and their children, a victim's resiliency to seek help, and the role of intervention in assisting victims at different levels of their environment.

Overall, the Human Ecological Theory suggests that different contexts of a person's life are essential to understanding their experiences. Thus, this study will integrate two additional theories that focus on specific contexts. The next two theories, Feminist Theory and Social Disorganization Theory, are used to guide this study's hypotheses.

**Feminist theory.** Feminism derives from a social movement to end oppression against women and ensure equal rights and opportunities for both women and men (Kimball, 1995). The traditional feminist perspective views relationships, and society in general, as influenced by gender and power (Yllo, 2005). Society's structure of male power, or patriarchy, contributes to economic, social, and political power disparities between women and men (Barnett, 2000; Loseke & Kurz, 2005). Specifically, this historical perspective suggests that these inequalities between women and men are associated with, and a cause of, relationship violence. Moreover, the original two waves of feminism have suggested that because patriarchy is the sole cause of IPV, men are immune to victimization (George & Stith, 2014). This perception is misconstrued and has negative impacts on males and their experiences of IPV. Because men are stereotypically viewed as strong and masculine, victimization of IPV may cause society to question their masculinity (Morgan, & Wells, 2016), which may result in feelings of shame within men (Shorey et al., 2011). In return, shame within men has been linked to IPV perpetration (Harper, Austin, Cercone, & Arias, 2005). Struve (1990) explains that patriarchy significantly influences all individuals, regardless of gender. Even for men, there are various negative impacts of patriarchy.

Traditional waves of feminism (i.e., first and second waves) have been rooted in



male dominance and control over woman. However, third wave feminism suggests there are multiple forms of violence perpetrated by both men and women in different contexts. Consequently, Johnson (2008) classifies IPV into intimate terrorism, violent resistance, and situational couple violence. Intimate terrorism is the consistent coercive control that uses physical and sexual violence, as well as other forms of control (e.g., intimidation, economic abuse, constant monitoring). This type of violence is consistent with traditional feminism, as it is largely perpetrated by males (Johnson, 2005). Violent resistance is the violent response to intimate terrorism by victims, either inadvertently or pre-meditated. Situation couple violence occurs when conflict between a couple becomes aggressive, which turns into violence. Johnson's framework acknowledges that IPV occurs in different circumstances and is not always unidirectional.

Patriarchal values are indeed associated with traditional gender role attitudes, which have been linked to attitudes towards IPV and IPV in general. In fact, perpetrators of intimate terrorism have significantly more traditional gender role attitudes than nonviolent men (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000), making intimate terrorism a gender issue (Johnson, 2005). However, other forms of IPV, namely violent resistance and situational couple violence, are typically not gender issues, as both males and females perpetrate these types of violence at rather equal rates. Male perpetrators of these forms of IPV do not have stronger traditional gender role attitudes compared to nonviolent men (Holtzworth-Munroe et al., 2000). This finding suggests other factors may be associated with IPV as well, specifically sociocultural factors (e.g., isolation, anonymity). Therefore, an important consideration for this study is the third wave feminist movement.

The third wave feminist movement suggests that one must view feminism with an intersectional, anti-oppressive lens, where there are multiple intersecting factors associated with IPV that occurs among victims of different characteristics, including men. There is a need to explore the association of gender roles with IPV, as well as gender interactions, as one form of IPV is specifically linked to gender (i.e., coercive control). However, there is also a need to examine how additional factors impact IPV, as other types of violence are not necessarily associated with gender and gender roles (i.e., violent resistance, situational couple violence) (Holtzworth-Munroe et al., 2000).

Overall, the first two waves of feminism concentrated predominantly on women's rights without considering how race, gender, and other social demographics intersect to influence a person's experiences. Third wave feminism acknowledges individuals of all genders, races, sexual orientations, and classes, and thus, views IPV as caused by additional oppressive factors, other than merely patriarchy (Crenshaw, 1991; Kesselman, McNair, & Schniedewind, 2008; George & Stith, 2014). However, Sandberg (2013) argues that traditionally, IPV has been studied through the power imbalances of gender, race, ethnicity, age, and sexuality. The intersection of urban/rural geographies with IPV has rarely been considered, even though locality is linked to power and marginalization. Specifically, ignoring the impact of rurality on both perpetrators' and victims' experiences overlooks particular vulnerabilities that are not attributed to other social demographics, such as gender, ethnicity, or sexuality.

Furthermore, scholars have historically argued that the feminist theory should only be used to inform qualitative research. However, feminist scholars have recently emphasized the importance of not limiting the feminist perspective to qualitative

research, as quantitative studies may benefit from the framework as well (Harnois, 2012). Feminist theory acknowledges the researcher's place of power and the power indifferences that exist between the research and population being studied. The use of quantitative methods, as opposed to face-to-face qualitative interviews, may mitigate this power difference (Ackerly & True, 2008). Additionally, the feminist theory can be beneficial in quantitative research to explore gender differences (Harnois, 2012).

**Social disorganization theory.** In addition to the feminist theory, the social disorganization theory is used to guide this study. Shaw and McKay (1942) first coined the social disorganization theory and explained that crime and disorganization within a community can be attributed to structural characteristics. However, rural crime is less frequently examined, which some scholars argue is due to the perceived notion of rural areas as peaceful and less violent compared to urban areas (Sandberg, 2013; Websdale, 1998). Nevertheless, the structural characteristics of the rural context, such as isolation, can lead to the tolerance and promotion of violence, including IPV (Lanier & Maume, 2009; Van Wyk, Benson, Fox, & DeMaris, 2003). Rural communities oftentimes are isolated from customary standards, which can result in shared cultural norms among the community that tolerate certain behaviors, such as IPV (Sampson & Wilson, 1995; Van Wyk et al., 2003). Location is also linked to power, which Sandberg (2013) explains is why IPV must be understood in terms of locality. In other words, the social disorganization theory suggests that location matters; location impacts the experiences of relationship violence. However, the use of this theory in this study is not to perpetuate stereotypical perceptions of rural inhabitants as provincial, and thus, further marginalize victims. Instead, this theory guides the notion that the rural context contributes to

perceptions and experiences of ADV (Sandberg, 2013).

## **CHAPTER 2: LITERATURE REVIEW**

### **Overview**

The following section is a summary of the ADV literature. The summary includes an overview of adolescent dating relationships, ADV victimization and perpetration, and consequences of ADV on adolescents' development and well-being. In addition, aspects of the rural context will be discussed in regards to ADV. Literature on rural adult IPV will also be included in this section, as research on ADV in the rural context is minimal. Rural factors to be discussed include gender role attitudes, rural isolation, and perceptions of anonymity.

### **Adolescent Dating Relationships**

Dating relationships during adolescence fit into the natural developmental order of social relationships and how relationships develop and emerge over the lifespan. Dating during adolescence provides exposure and experience with relationship behaviors, such as reciprocity, cooperation, and companionship (Meier & Allen, 2009). Additionally, dating relationships provide adolescents an opportunity to develop their sexuality and self-identity (Furman & Shaffer, 2003). Most adolescents begin engaging in casual and short-term dating relationships during early adolescence. By later adolescence, these relationships become steadier and more serious, where partners are more sexually and emotionally intimate (Collins, 2003; Meier & Allen, 2009). Though adolescent dating relationships offer various developmental benefits, they also increase an individual's risk for negative experiences, such as ADV (CDC, 2016a; Halpern et al., 2009).

## **ADV Victimization and Perpetration**

Research has traditionally suggested that females are more likely to experience ADV victimization compared to males (Bergman, 1992). This trend was likely due to various reasons, including scholars and professionals historically overlooking males' experiences of IPV (Drijber, Reijnders, & Ceelen, 2013), males underreporting their experiences of IPV victimization due to stigma and shame (Barber, 2008), and more traditional family roles that have emphasized male dominance and female submissiveness (Reyes, Foshee, Niolon, Reidy, & Hall, 2016). However, recent research contradicts this notion and suggests that males are victimized by ADV as frequently as females (Cascardi & Avery-Leaf, 2015; Reidy et al., 2016). Female adolescents are more likely to perpetrate verbal ADV, whereas male adolescents more often perpetrate controlling violence over their partner (Cascardi & Avery-Leaf, 2015). Additionally, motives for perpetrating ADV often differ between males and females. Female adolescents are more likely to perpetrate ADV as a response to their boyfriends' controlling behaviors, and males are more likely to terrorize and perpetrate violent ADV against females as a method of control (Foshee, Bauman, Linder, Rice, & Wilcher, 2007).

In addition to in-person ADV, cyber ADV has become increasingly problematic with recent technological advances (e.g., Melander, 2010). Cyber ADV is relevant to this study, as rural adolescents are often geographically isolated from one another and may rely on technology to perpetrate ADV. Technology has created a virtual community in which individuals interact. Technology provides an efficient way to manipulate, monitor, and purposefully humiliate intimate partners, as partners are not required to be geographically nearby for this aggression to occur (Kelly & Johnson, 2008; Melander,

2010). Technology also allows adolescents to continue perpetrating ADV, even when the perpetrators are unaware of their victims' locations. Cyber ADV includes distinctive behaviors compared to offline IPV, such as using online surveillance of a partner (including an ex-partner), posting photographs with the intention of humiliating a partner or ex-partner, and sending demeaning and embarrassing comments through online platforms (Borrajo, Gámez-Guadix, & Calvete, 2015; Lyndon, Bonds-Raacke, & Cratty, 2011; Zweig, Dank, Yahner, & Lachman, 2013). As Korchmaros, Ybarra, Langhinrichsen-Rohling, Boyd, and Lenhart (2013) suggest, cyber ADV is often an extension of offline ADV perpetration and both forms of perpetration should be considered concurrently.

Previous research has identified various predictors of IPV victimization and perpetration, such as antisocial personality disorder, borderline personality disorder, mania, depression, and post-traumatic stress disorder (Dutton, Starzomski, & Ryan, 1996; Reingle, Jennings, Connell, Businelle, & Chartier, 2014; Stuart et al., 2008; Taft et al., 2007). Many of these factors may elevate shame in an individual, which has been found to increase the tendency that one will perceive events and actions as negative and as a rejection (Gilbert, Pehl, & Allan, 1994; Leskela, Dieperink, & Thuras, 2002). Shame is often associated with perpetrating IPV as a way to deal with feelings of inadequacy and incompetence (Covert, Tangney, Maddux, & Heleno, 2003; Dutton, van Ginkel, & Starzomski, 1995).

Furthermore, research has identified gender differences in perceptions towards ADV. Many males perceive their experiences of ADV victimization as a result of making sexual advances towards their female partner. In contrast, females perceive their

experiences of ADV victimization as a result of refusing their male partners' sexual advances. Additionally, adolescent females perceive ADV to have severe physical and psychological consequences, whereas adolescent males were more likely to perceive ADV as harmless (Molidor & Tolman, 1998).

IPV (including ADV) has been biased towards male perpetrated IPV, overlooking instances where females are the perpetrators. Dutton and White (2013) argue that scholars have approached IPV using a lens of traditional patriarchy and only view males as the perpetrators. Many previous scholars have been one-sided in their measurement of IPV victimization and perpetration by only asking females of their IPV victimization experiences (Johnson, 2008). Furthermore, Dutton and White (2013) argue that other scholars have only inquired about victimization and not experiences of both perpetration and victimization. Approaching IPV studies using the aforementioned approaches misrepresents the issue and leads to distorted implications for intervention and future research. This study measures ADV victimization and perpetration among both males and females.

### **Defining Rural**

Some scholars conceptualize rural in terms of social characteristics, such as tight knit communities influenced by local histories, strong social and family relationships, and more traditional views towards gender and sexuality (Little, 2017). Other scholars focus on population, conceptualizing rural as a place with low population density and a sparse population (Pruitt, 2008). It is clear that there is no collectively established conceptualization of "rural." A comprehensive conceptualization of the rural context would include the physical location, as well as the shared values and practices of people



in their social environments (Jiwani, Moore, & Kachuk, 1998; Moscovici, 1984). This study conceptualizes rural as both a physical and social environment.

### **Rural Context and ADV**

Recently, scholars have expressed that rural victims of IPV have historically been suffering in silence (DeKeseredy, Donnermeyer, Schwartz, Tunnell, & Hall, 2007). Scholars suggest there are specific sociocultural factors of the rural context that should be acknowledged when aiming to understand rural IPV, such as traditional gender role attitudes, isolation, and perceptions of reduced anonymity (i.e., reduced privacy) (Riddell, Ford-Gilboe, & Leipert, 2009). In fact, these factors have been found to perpetuate adult IPV in the rural context (Peek-Asa et al., 2011). However, research on ADV has yet to examine how these sociocultural factors (i.e., traditional gender roles, isolation, and reduced anonymity) impact ADV. Data on these factors may help to understand specific ADV vulnerabilities of adolescents living in rural areas. The current study will examine the relationship between the rural context and ADV.

**Gender roles and attitude toward ADV.** Gender roles can be defined as the accepted behavior of a person based on their sex (Boehnke, 2011). Attitudes towards gender roles (gender roles hereafter) predict decision-making, behaviors, and beliefs towards issues, including violence and crime (Ben-David & Schneider, 2005; Davis & Greenstein, 2009; Vespa, 2009). These attitudes can surface as traditional beliefs about the roles within families and intimate relationships and can be a script for how couples are supposed to act in these relationships (Bem, 1993; Lichter & McCloskey, 2004). Gender roles are categorized on a continuum between traditional and egalitarian. A person with traditional gender roles supports the division of behaviors and jobs, both

within and outside the home, based on sex. For instance, those who hold traditional gender roles may believe that women should be homemakers and men should be the financial providers. A person with egalitarian gender roles values an equal distribution of household and labor responsibilities regardless of sex (Brines, 1994; McHugh & Frieze, 1997; Riley, 2003). People in the rural context oftentimes have strong traditional gender roles (Rezek, 2010; Websdale, 1998). Characteristics commonly present in rural communities, such as structures that cause women to hesitate seeking help for IPV and people who view men's work as more valuable, encourage these strict traditional gender roles (DeKeseredy & Joseph, 2006; Voyce, 2014; Websdale, 1998).

Research findings have shown an association between gender roles and attitudes towards ADV. Adolescents with more traditional gender roles tend to be more accepting of ADV (Lee, Begun, DePrince, & Chu, 2016; Slep, Cascardi, Avery-Leaf, & O'Leary, 2001). Moreover, attitudes towards ADV have been significantly associated with experiences of ADV (Capaldi, Knoble, Shortt, & Kim, 2012). The relationship between gender roles and attitudes towards ADV, and the relationship between attitudes towards ADV and experiences of ADV, suggest the link between gender roles and experiences of ADV. Research confirms this relationship. Scholars have found that traditional gender roles can put couples at risk for relationship violence, including ADV (O'Keefe, 1997; Cate, Henton, Koval, Christopher, & Lloyd, 1982; Reitzel-Jaffe & Wolfe, 2001; Reyes et al., 2016). People with more traditional gender roles tend to be more accepting of rape and sexually aggressive behaviors and, thus, are more likely to perpetrate violence in their own relationships (Malamuth, Sockloskie, Koss, & Tanaka, 1991; Muehlenhard & Linton, 1987; Reitzel-Jaffe & Wolfe, 2001). Moreover, scholars have argued that

challenges to the traditional gender order have put women at risk for IPV victimization. As women gain more social and economic status, men are more likely to exert IPV as a way to uphold their power (e.g., DeKeseredy & Schwartz, 2009). Literature even shows that adolescent females are at a higher risk for ADV victimization when they support traditional gender roles (Foshee, Benefield, Ennett, Bauman, & Suchindran, 2004).

Traditional views on the roles in intimate relationships tend to be the strongest during adolescence, when both boys and girls are still trying to establish and determine expectations for their gender (Hill & Lynch, 1983; Feiring, 1999). Previous research has examined how gender roles in the rural context impact IPV among adults. The association of gender roles among rural adolescents and ADV has yet to be explored.

Based on previous research, the current study hypothesizes the following:

***Hyp 1a:*** There will be a positive relationship between gender roles and ADV victimization, with attitudes towards ADV mediating this relationship; adolescents with more traditional gender roles will have more supportive attitudes towards ADV, which will be associated with higher rates of ADV victimization.

***Hyp 1d:*** There will be a positive relationship between gender roles and ADV perpetration, with attitudes towards ADV mediating this relationship; adolescents with more traditional gender roles will have more supportive attitudes towards ADV, which will be associated with higher rates of ADV perpetration.

**Isolation.** Isolation is a second sociocultural aspect of the rural context and is argued by Lanier and Maume (2009) to be a key component to understanding rural relationship violence. Research suggests that women who live in rural areas are more likely to experience IPV (Peek-Asa et al., 2011). Though minimal research has studied

why IPV may occur more frequently in the rural context, scholars have suggested that the isolation aspect of the rural context may play a role. Rural isolation is believed to not only influence the frequency of IPV, but also the severity of the violence (Maume, Lanier, Hossfeld, & Wehmann, 2014; Thomas, 2009).

Previous research has acknowledged three main categories of rural isolation: geographic (Websdale, 1998), social (Monk, 2000), and structural (Henderson & Taylor, 2003). Geographic isolation provides a setting where violence can be concealed, as there may not be as many people geographically nearby to hear or observe the violence compared to in the urban context (Websdale, 1998). Though adolescents tend to live separately from their partners, geographic isolation may still perpetuate the violence in their relationship. Fewer people (e.g., neighbors, community members) may be around to witness or hear the violence. Additionally, people in the rural context tend to have less access to social resources, particularly friends and family who are willing to help or people to ask for help (DeKeseredy & Schwartz, 2009; Edwards, 2014). As research suggests, living further away from friends and family can further perpetuate violence (CDC, 2016b; Jiwani et al., 1998; Websdale, 1998).

The rural context also has fewer structural resources, such as social services, health care, and transportation, which limits a victim's opportunity to seek help (DeKeseredy & Joseph, 2006; DeKeseredy et al., 2007; Websdale, 1998). Even when rural victims do break social norms by seeking structural help for IPV, they face many barriers in doing so compared to victims in the urban context. The rural context has fewer IPV shelters, mental health providers, and law enforcement compared to the urban context. Only one third of rural counties in the country have services for IPV victims

(e.g., shelters, counseling, hotlines, legal services), compared to 71% of urban counties (Klein et al., 2009). Over 25% of victims in rural areas live over 40 miles from the closest IPV service, while less than 1% of victims in urban areas live that far from an IPV service (Peek-Asa et al., 2011). Because the services in the rural context are sparse, they serve more counties and a larger area. Thus, it takes longer and is not as convenient for victims to reach these services if they are seeking them out. Additionally, people in the rural context are further away from medical resources, which are often the only IPV screening and resource available to rural residents (Peek-Asa et al., 2011). Even if a victim wants to seek help, many do not have access to transportation (Riddell et al., 2009). However, if a victim in a rural area is able to reach an IPV service, there is no guarantee that they will receive help. Victims in the rural context are twice as likely to be turned away from IPV services because of the lack of staff or resources (Lanier & Maume, 2009). The lack of services in the rural context, as well as rural victims' hesitancy to utilize these services, may deter victims from seeking help and thus, perpetuate their experiences of violence.

Similarly, rural adolescents tend to face many barriers to physical and mental health services, as a result of transportation challenges and a scarcity of providers (National Rural Health Association, 2016; Zimmer-Gembeck, Alexander, & Nystrom, 1997; DeVoe, Krois, & Stenger, 2009). In general, social support is a protective factor for adolescents against unhealthy behaviors and outcomes (WHO, 2007). Though isolation has been investigated with IPV among adults, it has not yet been investigated in terms of rural ADV. The current study hypothesizes the following:

*Hyp 1b:* There will be a negative relationship between isolation and ADV victimization; adolescents who are more isolated will be associated with higher rates of ADV victimization.

*Hyp 1e:* There will be a negative relationship between isolation and ADV perpetration; adolescents who are more isolated will be associated with higher rates of ADV perpetration.

**Anonymity.** Though a noteworthy aspect of rural areas is isolation, the social interactions in a sparsely populated area create a paradoxical situation where residents have a lessened sense of anonymity (Sandberg, 2013). When people feel that their neighbors, friends, and community know their business and that they have limited privacy, they may try harder to keep their personal lives private in order to avoid public scrutiny. This may explain why many people in rural towns report not knowing about IPV that occurs amongst their neighbors or friends (Carrington, McIntosh, Hogg, & Scott, 2013). Perceptions of reduced anonymity may also explain why victims of IPV in the rural context can be reluctant to seek help. Many victims fear that their business will not be kept confidential and that their family and friends will find out about their situation (Merritt-Gray & Wuest, 1995; Biesenthal, Plocica, & Sproule, 1997). As a result of reduced anonymity, many people in rural areas try harder to keep their business private, which may allow IPV to go unaddressed, further perpetuating the violence (Carrington et al., 2013). Overall, previous research on rural IPV among adults suggests individuals who perceive reduced anonymity are less likely to seek help for fear their privacy will be compromised, making it likely they experience more IPV (Wendt, 2009).

However, previous research is inconsistent on whether reduced anonymity among adolescents would further perpetuate ADV. On the one hand, Garside, Ayres, Owen, Pearo, and Roizen (2002) suggest that this finding among adults would be consistent with adolescents. Findings from their study indicate that rural adolescents hesitate to seek out certain medical care, such as sexual health services, because of reduced anonymity. Many fear that their personal business might be revealed to family, friends, or other members of the community. This research used qualitative methods to assess rural adolescents' perceptions of anonymity and their willingness to seek services. Contrarily, other quantitative studies on adolescents suggests otherwise. Adolescents who develop in unsupervised environments with unengaged parents (i.e., more anonymity) are more likely to partake in unhealthy and aversive behaviors (Karofsky, Zeng, & Kosorok, 2001; Radziszewska, Richardson, Dent, & Flay, 1996; Richardson, Radziszewski, Dent, Flay, 1993). In other words, when adolescents have involved people in their lives who are aware of their business (i.e., less anonymity), they are less likely to involve themselves in unhealthy circumstances. Adolescents are less likely to engage in unhealthy and aversive behaviors, such as drug use and sexual activity, when there is open communication and awareness of their behaviors (Karofsky et al., 2001).

Overall, research suggests inconsistent findings in regards to the adolescent population and the relationship between anonymity and ADV. These findings may be inconsistent as a result of the varying research methods used in the studies, indicating a mixed methods study may provide insight into the association of perceived anonymity among rural adolescents and experiences of ADV victimization and perpetration. This inconsistency in the literature suggests a need to explore the relationship between

perceived anonymity and ADV, as anonymity is a specific component of the rural culture. Much research on adolescence suggests that adolescents with reduced anonymity are less likely to be involved with ADV. Thus, the current study hypothesizes the following:

*Hyp 1c:* There will be a negative relationship between adolescents' perceived anonymity and ADV victimization; adolescents who perceive more anonymity will have higher rates of ADV victimization.

*Hyp 1f:* There will be a negative relationship between adolescents' perceived anonymity and ADV perpetration; adolescents who perceive more anonymity will have higher rates of ADV perpetration.

## **Gender**

Hypothesis 2 examines the moderating effect of gender on the relationships tested in Hypothesis 1. Hypothesis 1a and 1d examine the relationship between gender roles and ADV, with attitudes towards ADV mediating this relationship. Hypothesis 2a and 2d test the gender interactions between gender roles and ADV, with attitudes towards ADV mediating this relationship. Though the gender gap pertaining to childrearing and work within the home is decreasing (Bianchi & Milkie, 2010), men still tend to hold more traditional gender roles than women (e.g., Baber & Tucker, 2006; Glick & Fiske, 2001). This finding has stood over time and is consistent cross-culturally (Davis & Wills, 2010; Marks, Bun, & McHale, 2009). Studies in the United States also show that men favor the use of IPV more than women (Merten & Williams, 2009). Additionally, scholars have identified traditional gender roles as a risk factor for female victimization, specifically



(e.g., Caldwell, Swan, & Woodbrown, 2012). Thus, the current study hypothesizes the following:

**Hyp 2a:** The relationship between gender roles and ADV victimization, with attitudes towards ADV as a mediator, will be stronger for females; female adolescents with stronger traditional gender roles will have more supportive attitudes towards ADV, which will have higher rates of ADV victimization compared to males.

**Hyp 2d:** The relationship between gender roles and ADV perpetration, with attitudes towards ADV as a mediator, will be stronger for males; male adolescents with more traditional gender roles will have more supportive attitudes towards ADV, which will have higher rates of ADV perpetration compared to females.

Next, Hypothesis 1b and 1e examine the relationship between isolation and ADV. Hypotheses 2c and 2e test the gender interactions between isolation and ADV. Research shows that female adolescents tend to be more sensitive to social isolation, which oftentimes puts them at risk for unfavorable circumstances, such as suicide or sexual victimization (Alvi, Schwartz, DeKeseredy, & Maume, 2001; Bearman & Moody, 2004; Raphael, 2001). Female adolescents who are victim to bullying also have lower levels of social support compared to male adolescents (e.g., Boulton & Smith, 1994). However, males who feel isolated are often more likely to become violent (Garbarino, 1999; Leary, Kowalski, Smith, & Phillips, 2003). The current study hypothesizes the following:

**Hyp 2b:** The relationship between isolation and ADV victimization will be stronger for females; female adolescents who are more isolated will have higher rates of ADV victimization compared to males.

*Hyp 2e:* The relationship between isolation and ADV perpetration will be stronger for males; male adolescents who are more isolated will have higher rates of ADV perpetration compared to females.

Finally, Hypothesis 1c and 1f examine the relationship between anonymity and ADV. Hypotheses 2c and 2f test the gender interactions between anonymity and ADV. Research suggests that females are more sensitive to adverse behaviors as a result of lack of anonymity. For instance, many rural women are hesitant to seek out law enforcement's help as a result of lack of anonymity and fear that the police associate their perpetrator (Websdale & Johnson, 1997). This reduced anonymity may cause victims to stay in violent relationships and experience more IPV. On the other hand, males are more likely to engage in relational aggression and risk behaviors when they have more anonymity and experience permissive parenting (Beck, Shattuck, Raleigh, 2001; Casas et al., 2006). Therefore, the current study hypothesizes the following:

*Hyp 2c:* The relationship between adolescents' perceived anonymity and ADV victimization will be stronger for females; female adolescents who perceive higher anonymity will have higher rates of ADV victimization compared to males.

*Hyp 2f:* The relationship between adolescents' perceived anonymity and ADV perpetration will be stronger for males; male adolescents who perceive higher anonymity will have higher rates of ADV perpetration compared to females.

## **Summary**

Though ADV has a variety of risk factors, this study is approaching ADV with a sociocultural basis. Table 1 provides a summary of the hypotheses in this study.

Table 1
<i>Summary of Hypotheses</i>
Hypotheses for Research Question 1 examine direct relationships between the rural context and ADV victimization and perpetration.
<b>Hyp 1a:</b> There will be a positive relationship between gender roles and ADV victimization, with attitudes towards ADV mediating this relationship; adolescents with more traditional gender roles will have more supportive attitudes towards ADV, which will be associated with higher rates of ADV victimization.
<b>Hyp 1b:</b> There will be a negative relationship between isolation and ADV victimization; adolescents who are more isolated will be associated with higher rates of ADV victimization.
<b>Hyp 1c:</b> There will be a negative relationship between adolescents' perceived anonymity and ADV victimization; adolescents who perceive more anonymity will have higher rates of ADV victimization.
<b>Hyp 1d:</b> There will be a positive relationship between gender roles and ADV perpetration, with attitudes towards ADV mediating this relationship; adolescents with more traditional gender roles will have more supportive attitudes towards ADV, which will be associated with higher rates of ADV perpetration.
<b>Hyp 1e:</b> There will be a negative relationship between isolation and ADV perpetration; adolescents who are more isolated will be associated with higher rates of ADV perpetration.
<b>Hyp 1f:</b> There will be a negative relationship between adolescents' perceived anonymity and ADV perpetration; adolescents who perceive more anonymity will have higher rates of ADV perpetration.
Hypotheses for Research Question 2 examine relationship patterns between the rural context and ADV victimization and perpetration with gender as a moderator.
<b>Hyp 2a:</b> The relationship between gender roles and ADV victimization, with attitudes towards ADV as a mediator, will be stronger for females; female adolescents with stronger traditional gender roles will have more supportive attitudes towards ADV, which will have higher rates of ADV victimization compared to males.

<p><b>Hyp 2b:</b> The relationship between isolation and ADV victimization will be stronger for females; female adolescents who are more isolated will have higher rates of ADV victimization compared to males.</p>
<p><b>Hyp 2c:</b> The relationship between adolescents' perceived anonymity and ADV victimization will be stronger for females; female adolescents who perceive higher anonymity will have higher rates of ADV victimization compared to males.</p>
<p><b>Hyp 2d:</b> The relationship between gender roles and ADV perpetration, with attitudes towards ADV as a mediator, will be stronger for males; male adolescents with more traditional gender roles will have more supportive attitudes towards ADV, which will have higher rates of ADV perpetration compared to females.</p>
<p><b>Hyp 2e:</b> The relationship between isolation and ADV perpetration will be stronger for males; male adolescents who are more isolated will have higher rates of ADV perpetration compared to females.</p>
<p><b>Hyp 2f:</b> The relationship between adolescents' perceived anonymity and ADV perpetration will be stronger for males; male adolescents who perceive higher anonymity will have higher rates of ADV perpetration compared to females.</p>

Overall, the rural context tends to have unique factors that may perpetuate relationship violence, such as traditional gender roles, isolation, and reduced anonymity (Benson, 2009; Dillon & Savage, 2006). Despite the high prevalence rates, ADV research in the rural context is minimal. This study aims to investigate how sociocultural features of the rural context, including traditional gender norms, social isolation, and reduced anonymity, relate to ADV. Figures 1 and 2 depict the hypothesized relationships to be tested between the rural context and ADV. This study will consider both males and females as perpetrators and victims. Both adolescent males and females have been found to perpetrate and be victimized by in-person and cyber ADV (Borrajao et al., 2015; Foshee et al., 2007). A concurrent nested mixed methods design will be used, which involves

nesting (embedding) qualitative data collection in quantitative data collection to further understand the quantitative findings (Plano Clark & Creswell, 2008).

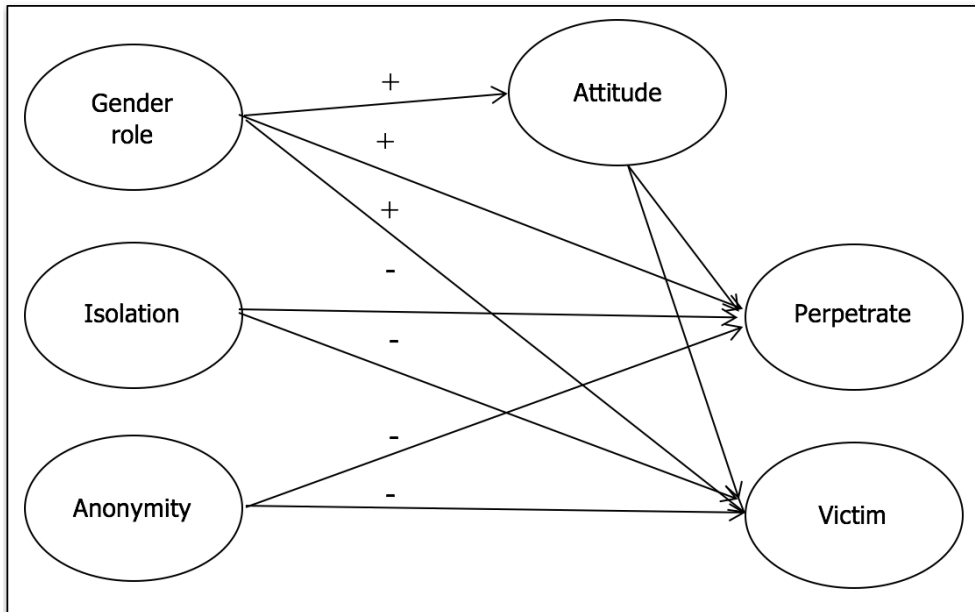


Figure 1. Research Question 1.

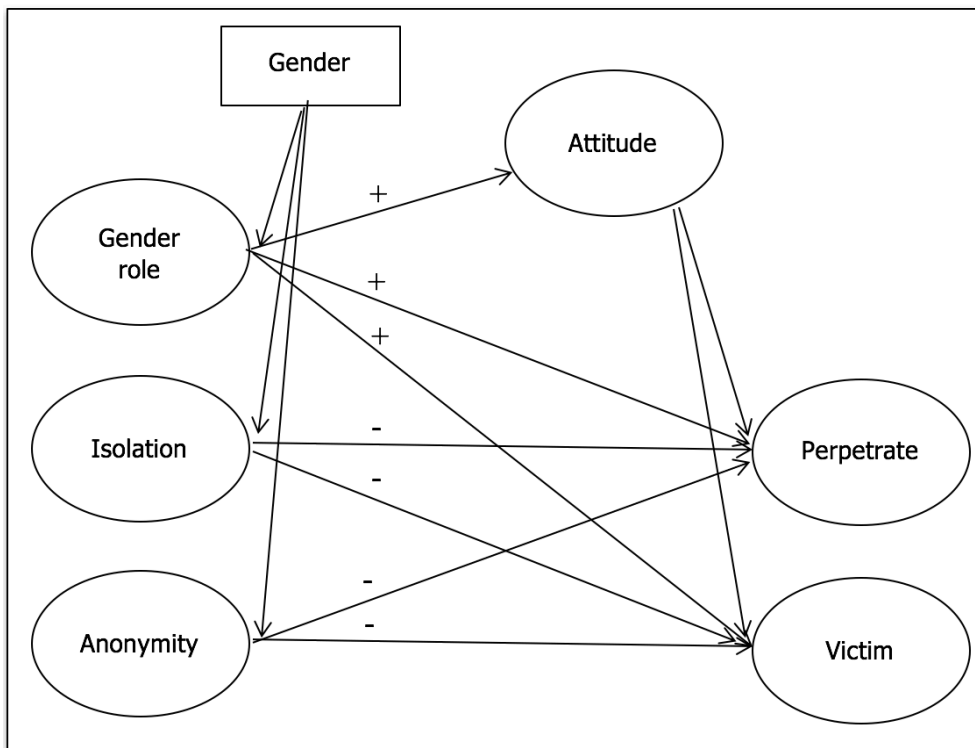


Figure 2. Research Question 2.

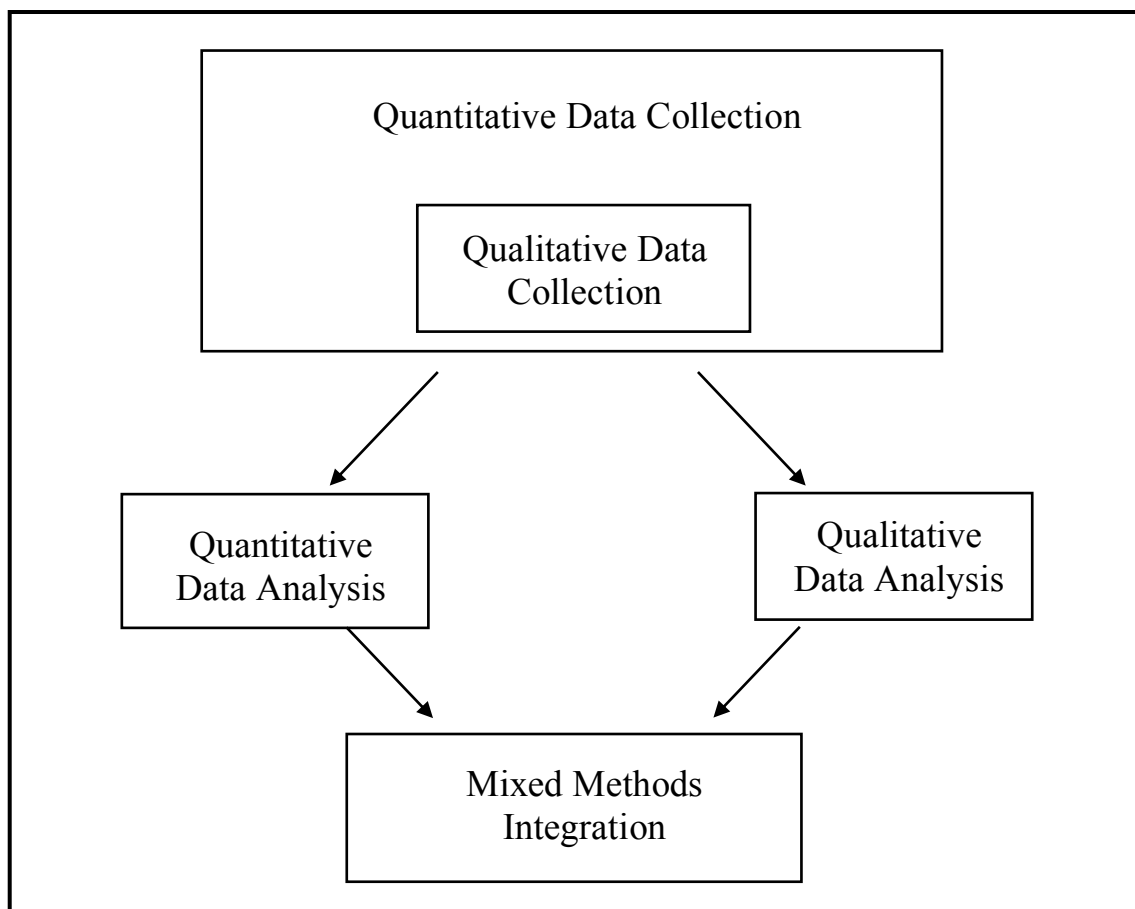
## CHAPTER 3: METHODS

### **Rationale for Mixed Methods Design**

Mixed methods research is the combination of both qualitative and quantitative research approaches to answer specific research questions. When used together, qualitative and quantitative approaches can be complementary (Creswell & Plano Clark, 2011). As explained in Creswell & Plano Clark (2011), a combination of quantitative and qualitative data can provide a more comprehensive understanding of an issue. In order to answer this study's research questions, a mixed methods approach is ideal. A mixed methods approach uses quantitative data to examine the relationships between sociocultural factors of the rural context and ADV and uses qualitative data to help explain the reasons behind these relationships and provide additional contextual information.

### **Type of Mixed Methods Design**

This study will use a concurrent nested mixed methods design where both quantitative and qualitative data are collected during the same phase through a survey (i.e., QUAN (qual)). The qualitative method is nested (or embedded) in the predominant quantitative phase and aims to provide additional perspectives on ADV in the rural context that cannot be gained from the quantitative data alone (Plano Clark & Creswell, 2008). Additionally, this design can help to explain complex or inconsistent quantitative results (Driscoll, Appiah-Yeboah, Salib, & Rupert, 2007).



*Figure 3.* QUAN (qual) Concurrent Nested Mixed Methods Design.

### **Participants**

**Sampling procedure.** Convenience sampling was used to select 208 rural adolescent participants (Creswell, 2013). The researcher used Extension personnel from previous professional relationships, youth program directors, Department of Health and Human Services personnel, and faculty at a Midwestern university to recruit through after-school programs, 4-H clubs, Health and Human Service youth programs, and freshman classes at a Midwestern university. Thus, participants were recruited through various locations for this study. Adult personnel were emailed the purpose and goals of the research and asked to share the web link to the study's online survey with adolescents

in their programs or classes (Appendix A). The researcher had no direct contact or interaction with participants in order to enhance feelings of confidentiality and privacy.

Criteria to participate were a.) between the ages of 13 – 19; b.) English speaking; and c.) residing (currently or during upbringing) in a rural area. For the purposes of this study, any house or town that is not a part of an urban area (50,000 people or more) was considered rural (United States Department of Agriculture Economic Research Service, 2016; United States Department of Agriculture Rural Division, 2017). Data were excluded from adolescents for not meeting the inclusion criteria. Three adolescents were excluded for not meeting the age criteria and eighteen were excluded for not meeting the criteria of rural. In addition, one participant was excluded for not meeting the validity checking criteria, which is addressed in the *Measures* section. In all, 186 responses were used for data analysis.

Before the study began, an institutional review board (IRB) form was completed and submitted to the University of Nebraska-Lincoln. Because participants for this study can be considered “vulnerable,” the researcher’s first priority was to maintain the participants’ safety and confidentiality. The data collected from the participants were completely anonymous. Participant names and other identifying information were not collected and organizations where the participants were recruited from is not included in the findings.

A waiver of parent consent documentation was granted through the University of Nebraska-Lincoln IRB. This waiver did not alter the rights or welfare of the participants, especially since participants were older adolescents who were capable of making their own decisions. Experts argue that adolescents have the cognitive ability to make their



own informed decisions about participating in research and have similar capabilities to making this decision as adults (Santelli et al., 1995; Weithorn & Scherer, 1994). Also, because of the topics assessed in this study (i.e., experiences and attitudes towards ADV, perceptions of parental monitoring), it was strongly believed that accurate data would not have been attained if parents were involved in the research process. Research has found that requiring parental consent for adolescent research on health and relationships skews the sample, as response rates significantly drop. As a result, research findings are biased with an under-representation of at-risk groups, which has implications for the application of the research findings to practice (Esbensen et al., 1996; Sancu, Sawyer, Weller, Bond, & Patton, 2004). Research also suggests that requiring parental consent while conducting research on adolescent relationships can place adolescents at risk and influence youth participation and their willingness to answer items honestly. Scholars argue that when parental consent is required, parents may ask their child about the study, which puts the child in a difficult situation. The child has to decide to either disclose personal information to their parents or refuse to disclose this personal information to their parents. Both situations place the child at risk for discipline and consequences from a parent (Phillips, 1994). Santelli et al. (1995) argue that essential information from research to address adolescent health issues is often missed because of this barrier (i.e., parental consent). Furthermore, a waiver of youth assent signature was requested for this study. This legal document, which involves a youth signature, might make participants feel that they were being identified in the study. Participants may have felt more comfortable answering the survey honestly since there was no identifying information attached to their responses.

Moreover, an a-priori power analysis for this study was challenging, given the lack of quantitative research on this topic. A published a-priori sample size calculator was used, as suggested by Kline (2016). This calculator computed the minimum sample size required to detect the specified effect of .3 (medium effect) and the minimum sample size required given the number of observed and latent variables in the hypothesized model. The probability level was set at .05. The minimum sample size to detect an effect of .3 was 161, and the minimum sample size for the model structure was 123 (Soper, 2017). Moreover, structural equation model social scientists tend to suggest a minimum sample size of 200 (Kline, 1998; Park, 2009; Weston & Gore Jr, 2006). Thus, the sample size for this study was just short of the recommended 200.

**Sample.** Table 2 provides an overview of participant demographics. Of the sample, 41.6% were boys, 57.8% were girls, and 0.6% identified as agender. Participants ranged in age from 13 to 19 years old ( $M=17.91$ ,  $SD=1.42$ ). The majority of participants identified their race as White (92.4%), followed by Black or African American (4.7%), American Indian/Alaska Native (1.2%), and Asian or Pacific Islander (1.7%). The majority of participants identified as Non-Hispanic (94.8%), whereas 5.2% identified as Hispanic. These percentages are slightly lower than the ethnic and racial minority population across Nebraska (U.S. Census Bureau, 2016). The majority of participants identified as heterosexual (94.8%), followed by bisexual (1.7%) and gay or lesbian (0.6%). Five participants (2.9%) reported that they were unsure of their sexuality. The population of participants' hometowns varied, with 21.1% growing up in a town with 499 or less people, 46.2% from a town with between 500-4,999 people, and 32.1% from a town with between 5,000 – 50,000 people. The majority grew up outside city limits on a

farm or ranch (53.2%), followed by 34.5% growing up within city limits and 12.3% growing up outside city limits not on a farm or ranch. The majority of participants lived in a house their family owned (92.9%), whereas 5.9% lived in a rented house and 1.2% lived in a rented apartment. The majority of participants did not receive free and reduced school lunches (82.5%), whereas 14.6% reported receiving free and reduced school lunch. Almost 3% did not know if they had received free and reduced lunch. The majority of participants had a mother (84.9%) and/or father (78.5%) living within their home. Some participants had a step-father (6.5%) or step-mother (3.2%) living within their home. Few participants had a grandmother or grandfather living within their home (2.2%).

Of the sample, 80.0% had begun dating behaviors. Forty percent of participants reported that they had begun dating, and 40.0% reported that they were currently in a relationship at the time of completing the survey. The length of relationship for participants currently in a relationship at the time of completing the survey ranged from a “few days” to 4 years and 9 months. The average length of relationships was approximately 1 year and 8 months. Most participants (98.7%) reported that their partner was the only person they are currently seeing. However, fewer participants (87.7%) reported that they were the only person their partner was seeing. The majority of participants report that they see their partner 1-2 times per week (39.7%) or at least once every two weeks (21.9%).

Of the participants who reported that they had started dating but were not currently in a relationship, frequently mentioned reasons for ending their past relationship were: they or their partner moved to college (24.5%), their partner cheated on them

(22.6%), or they or their partner lost interest in the relationship (22.6%). Three participants (5.7%) mentioned that their previous relationship ended because it was unhealthy.

Of the participants who reported that they have started engaging in dating behaviors, the majority reported either having had one (46.2%) or two (33.0) serious relationships. Almost all reported that their friends (97.7%) and parents (92.4%) knew about their dating partner(s).

Table 2

## Overview of Sample Characteristics

Variable	M	SD	%
Gender			
Male			41.6
Female			57.8
Agender			0.6
Age	17.91	1.42	
Race			
White			92.4
Black/African American			4.7
American Indian/Alaska Native			1.2
Asian or Pacific Islander			1.7
Ethnicity			
Hispanic/Latino			5.2
Non-Hispanic/Non-Latino			94.8
Sexual Orientation			
Heterosexual			94.8
Gay or lesbian			0.6
Bisexual			1.7
Unsure			2.9
Population of Hometown			
0-499			21.1

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500-4,999	46.2
5,000-50,000	32.1
Location of Home	
Outside city limits on a farm/ranch	53.2
Outside city limits, not on farm/ranch	12.3
Within city limits	34.5
Housing Type	
Own house	92.9
Rent house	5.9
Rent apartment	1.2
Free/reduced school lunch	
Yes	14.6
No	82.5
Do not know	2.9
Adults living within home	
Mother	84.9
Father	78.5
Step-mother	3.2
Step-father	6.5
Grandparent	2.2
Dating Behaviors	
Begun Dating Behaviors	40.0
Not Begun Dating Behaviors	20.0
Current in Relationship	40.0
Length of Dating Relationship	1.8 years
Are they the only person you are seeing?	
Yes	98.7
No	1.3
Are you the only one they are seeing?	
Yes	87.7
No	1.4
I don't know	11.0
How often do you see your partner?	

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Everyday	13.7
At least 3 time per week	19.2
1-2 times per week	39.7
Less than once a week	21.9
Less than once a month	5.5
Reasons for ending most recent relationship	
they or their partner moved to college	24.5
their partner cheated on them	22.6
They/their partner lost interest in the relationship	22.6
Relationship was unhealthy	5.7
Number of serious relationships	
None	6.2
One	46.2
Two	33.0
Three	12.3
Most than Three	2.3
Parents aware of relationship	
Yes	92.4
No	7.6
Friends aware of relationship	
Yes	97.7
No	2.3

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### **Data Collection**

**Quantitative phase.** Quantitative data were collected with a survey adapted from the measures described below. The survey was offered in an online format through SurveyMonkey, an online data collection software. The full survey can be viewed in Appendix B. Participants were provided an informed consent form prior to completing the survey (Appendix C). Online surveys completed by youth were directly submitted to the researcher through SurveyMonkey. The average time for survey completion was 11

minutes and 5 seconds. The survey was reviewed by educators who teach the sample age to ensure the survey items were presented at a comprehensible level for adolescents. The verbiage of the items was determined to be appropriate and comprehensible for the sample age.

***Measures.***

*Attitude towards gender roles.* Adolescents' attitudes toward gender roles were measured using the Ambivalent Sexism Inventory (ASI) short form (Glick & Whitehead, 2010). The original version of this measure, developed by Glick and Fiske (1996) consists of 22 items, with 11 items on the subscale of hostile sexism and 11 items on the subscale of benevolent sexism. Hostile sexism represents hostility and prejudice towards women. Comparatively, benevolent sexism represents the stereotypical behaviors and attitudes towards women, but positive in tone. These benevolent sexist behaviors and attitudes are often interpreted as intimate and chivalrous. Though benevolent sexist behaviors and attitudes are often perceived as positive, the undertone is rooted in masculine dominance and traditional gender roles (Glick & Fiske, 1996). Coefficient alphas for both the hostile sexism and benevolent sexism scales have ranged from .73 to .92. The ASI is positively correlated with other measures of sexism, including the Attitude Toward Women Scale (AWS) (.63) and Modern Sexism (.57), suggesting strong construct validity (Glick & Fiske, 1996). The ASI has been shown appropriate for use with adolescent samples (Lee et al., 2016; Montañés, Lemus, Moya, Bohner, & Megías, 2013; Morelli, Bianchi, Baiocco, Pezzuti, & Chirumbolo, 2016).

The ASI short was developed to include the original two subscales, but only consists of 12 items. For the short scale, the hostile sexism and benevolent sexism

subscales each have 6 items. The items selected for the short ASI have performed well psychometrically on previous studies. The hostile sexism subscale has a Cronbach's alpha of .78, and the benevolent sexism subscale has a Cronbach's alpha of .77 (Glick & Whitehead, 2010). Responses range from 1 (strongly disagree) to 5 (strongly agree). Overall, the short ASI demonstrates the same factor structure as the original ASI and comparable correlations between the two subscales, suggesting the short ASI is an adequate measure.

*Isolation.* There are no known existing measures that assess the aspects of rural isolation relevant to this study: geographic (Websdale, 1998), social (Monk, 2000), and structural (Henderson & Taylor, 2003). Thus, participants were asked 4 items pertaining to their distance from social network (e.g., friends), access to health services, availability of ADV resources, and available transportation. Responses range from 1 (strongly disagree) to 5 (strongly agree) to assess the extent to which participants feel they have access to the listed resources.

*Anonymity.* Adolescents' sense of anonymity was measured by perceptions of parental privacy and invasion using the Intrusiveness subscale of the Level of Expressed Emotion Questionnaire (Gerlsma & Hale, 1997) and students' perceptions of anonymity in their school environment using items from Blyth, Simmons, and Bush (1978). The Intrusiveness subscale includes 7 items, answered on a 4-point Likert scale (1 = *untrue* to 4 = *true*). This scale has been validated with adolescent samples and has a reliability ranging from .66 to .84 (Hawk et al., 2013). Adolescents' perceptions of anonymity in their school environment was assessed using four items on a 3 point Likert scale (1=never feel like this to 3=feel like this a lot). Alpha has been reported as .58 (Blyth et al., 1978).



As Touliatos, Perlmutter, and Straus (2001) explain, measures with fewer items typically have a lower alpha value.

*Attitudes towards ADV.* Adolescent attitudes towards ADV was measured using Macgowan's (1997) Attitudes about Relationship Violence subscale. This subscale measures Attitudes about Non-Physical Violence (7 items) and Attitudes about Physical/Sexual Violence (5 items). Responses range from 1 (strongly agree) to 4 (strongly disagree). The overall scale has an alpha of .73. Macgowan (1997) does not report validity information for this measure.

*Victimization and perpetration.* Recently, scholars have stressed the importance of measuring relationship violence not only in terms of what violent behaviors have occurred, but also the frequency of these behaviors, in order to not overlook perpetrators who only use a few tactics, but use them frequently (Hardesty et al., 2015). The Psychological Maltreatment of Women Inventory (PMWI; Tolman, 1989) is a widely used measure that assesses the frequency to which an individual experiences controlling behaviors. Previous research has attempted to adapt the PMWI to adolescent populations. Wolfe et al. (2001) combined two of the most popular measures of IPV, the Conflict Tactics Scale (CTS) (Straus, 1979) and the PMWI, to develop a scale with appropriate items for adolescents, referred to as the Conflict in Adolescent Dating Relationships Inventory (CADRI) scale. Then, Fernández-González, Wekerle, and Goldstein (2012) developed the CADRI short scale, which was used in this study to assess ADV victimization and perpetration.

The CADRI short consists of 10 items that measure ADV victimization and 10 that measure ADV perpetration. Five subscales include physical abuse (e.g., hit, punch),

sexual abuse (e.g., touched sexually, forced to have sex), threatening behavior (e.g., threatened to hurt), relational aggression (e.g., spread rumors), and emotional or verbal abuse (e.g., spoke with hostile tone of voice). This measure has a reported coefficient alpha of  $\alpha = .85$ , which is consistent with the original CADRI measure (Fernández-González et al., 2012; Wolfe et al., 2001). The CADRI short was significantly and positively correlated with the original CADRI ( $r = .91, p < .01$ ), suggesting the CADRI short has concurrent validity. Additionally, the CADRI short has adequate construct validity, as the confirmatory factor analysis revealed acceptable model fit,  $\chi^2(30) = 22.49, p = 0.836$ ; CFI = 1.00; RMSEA = 0.000 (Fernández-González et al., 2012).

In addition to the offline victimization and perpetration measure, 3 items for cyber ADV victimization and 3 items for cyber ADV perpetration were included (Reed, Tolman, & Safyer, 2015). These items were included, as cyber ADV and in-person ADV are typically related (Sargent, Krass, Jouriles, & McDonald, 2016). These items have a reported alpha of  $\alpha = .71$  for victimization and  $\alpha = .74$  for perpetration. Items reference cyber ADV behaviors through the Internet and cell phones. Participants are asked to answer how often in the previous year they experienced or perpetrated certain behaviors. Responses range from 0 (0 times) to 5 (5 times).

*Companionship and relational intimate disclosure.* Scholars have recommended including positive survey items when studying forms of IPV (Wolfe et al., 2001). Thus, adolescents' companionship and relational intimate disclosure is measured using the Companionship (COM) and Intimate Disclosure (DIS) subscales from the Network of Relationships-Social Provision Version (NRI-SPV) (Furman & Buhrmester, 1985). The COM includes three items that assess time spent doing activities together. The DIS

includes three items that assess communication and sharing information in relationships. Responses range from 1 (Little or none) to 5 (The most). The measure has a reported coefficient alpha of  $\alpha=.80$  (Furman & Buhrmester, 1985). The NRI-SPV correlates with the NRI-BSV, which measures similar constructs ( $r = .91$ , range = .88 to .93) (Furman & Buhrmester, 2009), suggesting adequate validity of the measure.

*Validity screening questions.* Oftentimes with adolescent research, researchers face the issue of participants over-reporting or under-reporting behaviors. Cornell, Klein, Konold, and Huang (2012) explain that adolescents often report inflated rates of certain behaviors or they do not complete the survey in a serious manner, often answering items haphazardly. To combat this issue, Cornell et al. (2012) recommend including validity screening items. This study uses the recommended items from Cornell et al. (2012) of “I am telling the truth on this survey,” “I am not paying attention to how I answer this survey,” and “The answers I have given on this survey are true.” Cornell et al. (2012) found that a small, but notable, number of adolescents will admit that they are not answering items honestly or purposefully, or as a result of participants answering items haphazardly, they unintentionally respond that they are not answering items honestly. Following Cornell et al. (2012)’s recommendation, students who respond with negative responses (e.g., strongly disagree, disagree) were classified as invalid responders and, thus, eliminated from data analysis.

*Demographics.* Participants were asked to answer demographic questions about themselves at the end of the measure. Socioeconomic status was not measured using the typical construct of family income, as experts have lower confidence in adolescents’ ability to report accurate family income information. Instead, Ensminger et al. (2000)

suggested assessing family structure (i.e., adults living in household) and if adolescents receive free or reduced lunchtime meals. This study included socioeconomic status demographic questions assessing free or reduced lunchtime meals, family structure, and family housing (e.g., live in apartment, own house).

*Relationship status and history.* To gain background information on the sample's dating history, items were included to assess participants' current dating status at the time of survey completion and other items related to dating history. The item assessing if adolescents have commenced dating behaviors was broadly worded, as Manning, Giordano, and Longmore (2006) found that adolescents use a variety of terms to describe their dating behaviors, including "friends with benefits," "hooking up," or "dating." Though many dating behaviors may not be exclusive or serious in nature, unhealthy dating behaviors may still occur, thus there is a need to take an encompassing measurement approach.

**Qualitative phase.** In order to further understand the relationships between the rural culture and ADV, the survey included open-ended questions to assess participants' reactions, perceptions, and feelings towards the rural constructs (i.e., gender roles, isolation, anonymity) and ADV. The qualitative phase also served as a way to explain and cross-validate the quantitative results. Examples of qualitative survey questions include: "Who or what has influenced your attitude on how people should act in relationships?" and "Please explain your sources of social support that you talk to about your boyfriend/girlfriend."

Strategies were followed to ensure validity of the qualitative data. According to Creswell (2013), validation of qualitative data includes assessing the "accuracy of the

findings, as best described by the researcher and the participants” (p. 250). Creswell (2013) goes on to explain that reported findings are the interpretation of the author. Out of eight validation strategies, Creswell (2013) suggests researchers engage in at least two. For this study, the following two validation strategies were used: 1) peer view and debriefing; 2) clarifying researcher bias.

***Peer view and debriefing.*** Peer view and debriefing helps to ensure honesty in the research process by serving as an external check. This peer serves as an external force that asks questions about the methods and interpretations, and as Creswell (2013) explains, serves as the “devil’s advocate” (p. 251). This study used a second peer researcher to access and provide feedback on the data analysis and interpretation.

***Clarifying researcher potential bias.*** To uphold the integrity of research, it is imperative that the researcher is aware of their own biases, experiences, and values they bring to the research study. Clarifying researcher bias involves a researcher positioning themselves in the research (Creswell, 2013). The researcher’s experiences may be both a strength and a limitation in this study. Having grown up and received her social conditioning in a rural area, the researcher of this study has first-hand knowledge of the physical and mental barriers to seeking help in rural areas, particularly for stigmatized and private issues. Though rural areas may be perceived as more tight-knit and ready to lend a “helping hand,” these characteristics can also be a barrier to seeking help for stigmatized issues due to the perceived lack of confidentiality and privacy. Even *if* reduced anonymity is merely a perception, it is the researcher’s observation that it still exists in rural areas and impacts the way residents live and choose to interact with others. The researcher must ensure that this perception does not impede data analysis and

interpretation of the findings.

Additionally, through the researcher's experiences working in the field of IPV, both as a researcher and as an advocate, she acknowledges her empathetic attitude towards survivors of IPV. These experiences may interfere with her interpretation of the study results. Moreover, the researcher acknowledges her active support of the feminist movement and the fight against struggles that still persist for women in society today. The researcher needs to ensure this stance does not diminish or overlook male's experiences of IPV. The third wave feminist perspective was used to guide this study and ensure the experiences of males was not diminished. Overall, to ensure her potential biases did not seep into interpretation of the data, the second peer researcher assessed and questioned data analysis and interpretation, as described above.

### **Data Analysis**

**Quantitative.** Data collected through the online survey were exported into an SPSS file. Data were cleaned in SPSS, and cases that did not meet the inclusion criteria were excluded. Composite and total scores were calculated to create total variables for analysis. *Hostile sexism* and *benevolent sexism*, variables for gender roles, were calculated as composite scores (i.e., averages). Following Glick and Whitehead (2010), high composite scores for both hostile sexism and benevolent sexism reflect more traditional attitudes. *Attitudes towards nonphysical ADV* and *attitudes towards physical/sexual ADV* were calculated as composite scores. Items 1, 3, and 6 on the attitudes towards ADV scale were reverse coded, as low mean scores for these items were desirable in the original scale, compared to the other items where high mean scores were desirable. Thus, high composite scores for both attitudes towards nonphysical ADV

and attitudes towards physical/sexual ADV are desirable (i.e., less favorable attitude towards ADV) (Macgowan, 1997). A total score was created for both *perpetration* and *victimization*. These total scores included responses from the physical, sexual, threatening, relational, verbal/emotional, and cyber items. Additionally, separate total scores for physical, sexual, threatening, relational, verbal/emotional, and cyber were calculated for both victimization and perpetration. Each of these total scores included the two items (or three for cyber) from each subscale. For all total scores, a higher score indicates a higher frequency of ADV (for both victimization or perpetration). Both continuous and binary variables were created for victimization and perpetration. Continuous variables were used for the structural equation models. Binary variables were created to calculate prevalence rates, as Fernández-González et al. (2012) explain that even if a person has only experienced a behavior once, they have still experienced it. In other words, participants who had not experienced a behavior were recoded as '0' and participants who had experienced a behavior to any extent were recoded as '1.' The four items assessing *Isolation* were totaled for one overall score. A higher score indicates less isolation (i.e., more access to services and resources). Total scores were created for *anonymity at school* and *anonymity with parents*. Items on the anonymity at school were reverse coded so that higher scores represent less anonymity and thus, was consistent with the anonymity with parents scale. Item 7 on the anonymity with parents scale was reverse coded as this item was negatively worded. Descriptive statistics were calculated with participants' demographic data and measures for study variables. Figure 4 represents the directional relationships of the variables.

Variable	—	+
Gender Roles Attitudes	Egalitarian-----	-----Traditional
Attitudes towards ADV	Favorable Attitudes -----	----- Not Favorable Attitudes
Perpetration/victimization	Have Not Experienced -----	----- Experienced
Isolation	More Isolated-----	-----Less Isolated
Anonymity	More anonymous-----	-----Less Anonymous

*Figure 4.* Directionality of Variables.

The hypotheses for the first research question were addressed using structural equation modeling to determine if there was a relationship between sociocultural factors (i.e., gender roles, isolation, and anonymity) in the rural context and ADV outcomes (i.e., ADV victimization, ADV perpetration). As previously discussed in the introduction, it is hypothesized that gender roles will have a positive relationship with ADV outcomes (i.e., ADV victimization, ADV perpetration) with attitudes towards ADV as a mediator; isolation will have a negative relationship with ADV outcomes (i.e., ADV victimization, ADV perpetration); and anonymity will have a negative relationship with ADV outcomes (i.e., ADV victimization, ADV perpetration).



Structural equation modeling is an extension of path analysis and assesses relationships between variables. Structural equation modeling includes latent variables in addition to observable variables (Raykov & Marcoulides, 2006). An advantage of structural equation modeling to other analysis strategies is that there is only a common variance, as random error has been estimated and removed. Thus, latent variables do not have random error. Mplus Version 7.4 was used to fit the data to the hypothesized models (Muthen & Muthen, 2015). A measurement model and structural model were conducted to test the hypothesized model in Figure 1. Despite all the recruiting efforts, the current study did not reach a sample size large enough to robustly test the structural model specified by Figure 1. Therefore, it was broken into seven smaller models based on the hypotheses with fewer variables and paths. The measurement models and structural models for the smaller models were tested. The researcher used Confirmatory Factor Analysis (CFA) to assess measurement models which indicate to what extent the latent variable is defined by the indicator variables before structural models were examined. Structural models test the hypothesized relationships between the variables, as shown in Figure 1.

The fit of the models was determined between the sample data and the hypothesized models. Fit indices provide an estimation of how well the models explain the relationships between the variables. Chi-square test, root mean square error of approximation (RMSEA), comparative fit index (CFI), and standardized root mean square residual (SRMR) are typically used to determine the models' goodness of fit in structural equation modeling. Specifically, values greater than 0.05 for chi square (i.e., nonsignificant), less than 0.06 for RMSEA, greater than 0.95 for CFI, and less than 0.08

for SRMR are the threshold values for this study and indicate the model has good fit (Kline, 2016). Once deemed the model has acceptable fit, specific paths are explored to determine the significant associations between variables.

The hypotheses for the second research question were addressed using moderation analysis with gender as the moderating variable (Figure 2). Moderation analyses were used to test for gender interactions. The moderation analyses examined if the relationship patterns between sociocultural factors (i.e., gender roles, isolation, and anonymity) in the rural context and ADV outcomes (i.e., victimization, perpetration) remain the same for adolescent males and females. As stated, it is hypothesized that the relationship between aspects of the rural context (i.e., gender roles, isolation, and anonymity) and ADV outcomes (i.e., victimization, perpetration) will depend on gender. Gender was dummy coded and used as a predictor variable to test for interactions.

**Qualitative.** Because the qualitative data were collected in the online survey format, transcription was not necessary. Open-ended text responses were exported into a file on a password-controlled computer. MAXQDA Version 12, qualitative data analysis software, was used to organize and analyze the data (Kuckartz, 2001). This software allows for text analysis and is used to visually link themes across segments of text.

Data analysis used an inductive qualitative content analysis process (Elo & Kyngäs, 2008). The goal of inductive data analysis is to begin by identifying specific segments of text and then combining codes into broader themes and a cohesive understanding (Chinn & Kramer, 1999). Codes were developed while analyzing the text in MaxQDA. First, participant responses were read and open-coding methods were used. Each comment was assigned a code based on the dominant messages conveyed in the

participant's response (Eisner, 1998). When more than one idea was expressed in a comment, multiple codes were assigned. Next, codes were combined into broader themes. The themes that emerged help explain the relationships between the rural context and ADV. The qualitative data was analyzed in order to best answer the qualitative and mixed method research questions.

The peer researcher also served as the second coder. The second coder was a trained, female, graduate assistant who had prior professional experiences working in contexts of abuse with both males and females. The peer researcher paid particular attention to men's experiences in that they were not overlooked in data interpretation process. Procedures were followed to ensure the reliability of data. Specifically, the emphasis for this study was on intercoder reliability. Intercoder reliability was used to ensure coders agreed upon coded passages. Intercoder reliability ensured the different codes were dependable between coders and that the findings were consistent with the data (Merriam, 2009). The coding assistant and researcher each coded the open-ended text from the first open-ended question (approximately 30% of the qualitative data). Then, both coders met to compare the codes and text segments that they coded. A codebook with the codes was established. The codebook included each code, a definition of each code, and an example text assigned to each code. See Appendix D for an example portion of codebook. Once the codebook was created and agreed upon, the coders individually reviewed the open-ended text from the first open-ended question to alter any of the coding they had originally completed. Then, they came back together to review the text segments and codes applied throughout the text. The coders compared their coding, and calculated Kappa, a statistic for inter-coder reliability. Everitt (1996)

argues a Kappa value above .60 is satisfactory. A Kappa of .92 was reached, which exceeds the recommended value. Once all of the transcripts were coded, the coders then collapsed the codes into themes. During the coding process, the primary researcher presented her codes, as well as memos, perceptions, and interpretations. The second coder noted her agreeance or disagreement through the process. In instances of disagreement, the researchers discussed their perspectives until they arrived at a consensus. The second coder also contributed original perspectives in the interpretation, which was incorporated into the mixed methods integration.

**Mixed methods integration.** Larger study conclusions were drawn during the mixed methods phase of the study. For the mixed methods data analysis, the qualitative findings were used to explain the quantitative data results. In other words, rural participants' perceptions were used to help explain ADV experiences and attitudes. This phase determined if the qualitative findings could provide a better understanding of rural ADV.

Following Creswell and Plano Clark's (2011) recommendations, both the quantitative data and qualitative data were analyzed separately. Then, the quantitative and qualitative data were compared and merged. The merging of the data determined if the quantitative and qualitative results were congruent. This study used Creswell and Plano Clark's (2011) side-by-side comparison for merged data analysis method to merge the two data sets. This method involves presenting the results from each data set together in a discussion to easily determine if the data merges and is congruent. Specifically, this study presents quantitative findings, qualitative findings that support the quantitative

findings, and then a statement that describes how the quantitative and qualitative data conform.

## CHAPTER 4: RESULTS

This chapter presents the quantitative results and qualitative findings from the survey. Descriptive statistics are presented to provide a more comprehensive assessment of ADV and the rural context. The quantitative results answer the first and second research questions. The first research question assesses the relationship between sociocultural aspects of the rural context (i.e., gender roles, isolation, anonymity) and ADV outcomes (i.e., victimization, perpetration) and is answered using structural equation modeling. The second research question explores the gender interactions between these relationships and is answered using moderation analyses. The qualitative findings answer the third research question, which explores adolescents' perceptions of relationships in the rural context. To answer this question, content analysis was used to discover themes that emerged from the qualitative data.

Table 3 presents victimization and perpetration rates for all participants and by gender group. Data was not normally distributed, as most participants reported perpetration and victimization frequencies closer to zero (i.e., 1 or 2 instances) with their current or most recent partner. The most frequently reported types of both ADV victimization and perpetration were emotional/verbal and cyber. The majority of both male and female adolescents who had begun dating behaviors reported victimization (81.6% males; 79.3% females) and perpetration (72.0% males; 73.5% females) of some form of ADV. Similar to recent research in urban areas (e.g., Cascardi & Avery-Leaf, 2015), females reported significantly higher rates of sexual victimization compared to males ( $X^2(1)=4.80, p<.05$ ) and males reported significantly higher rates of physical ADV victimization compared to females ( $X^2(1)=8.12, p<.05$ ).

Table 3

Percent Experiencing ADV by Gender						
Form of violence	Male (n=54)		Female (n=83)		All participants (n=137)	
	Perp	Vict	Perp	Vict	Perp	Vict
Physical	7.4	20.4	4.8	4.8	5.8	10.9
Sexual	1.9	3.7	1.2	15.7	1.5	10.9
Threatening	3.7	5.6	4.8	3.6	4.4	4.4
Relational	7.4	17.3	4.8	13.3	5.8	14.8
Emotional/verbal	50.9	63.0	61.4	64.6	57.3	64.0
Cyber	50.0	56.9	56.6	60.2	54.1	59.0
<b>Any form of ADV</b>	<b>72.0</b>	<b>81.6</b>	<b>73.5</b>	<b>79.3</b>	<b>72.9</b>	<b>80.2</b>

*Note.* Percentages do not add up to 100%, as many adolescents reported experiences with multiple types of ADV.

Table 4 presents victimization and perpetration rates by age group. Adolescents were divided into younger and older groups. The younger group was considerably smaller than the older group, and thus, a mid-adolescent group was not included. Older adolescents (ages 18-19) reported significantly higher rates of ADV perpetration compared to younger adolescents (ages 13-17) ( $X^2(1)=11.92, p<.05$ ). Both age groups had the majority of adolescents experiencing ADV victimization (60.0% younger; 83.3% older). A higher percentage of younger adolescents (16.7%) reported sexual ADV victimization compared to older adolescents (10.2%), though this difference was not statistically significant. Note that caution should be used when interpreting conclusions from percentages across age groups, as the groups are not equally distributed.

Nevertheless, the age breakdown provides evidence that younger adolescents are experiencing ADV victimization and perpetration.

Table 4

Percent Experiencing ADV				
Type of ADV	Younger Adolescents (n=12)		Older Adolescents (n=118)	
	Perp	Vict	Perp	Vict
Physical	0	8.3	6.8	11.9
Sexual	0	16.7	1.7	10.2
Threatening	0	0	5.1	5.1
Relational	0	9.1	6.8	15.4
Emotional/verbal	16.7	25.0	63.2	69.3
Cyber	16.7	54.5	59.5	60.3
<b>Any form of ADV</b>	<b>33.3</b>	<b>60.0</b>	<b>78.9</b>	<b>83.3</b>

*Note.* Percentages do not add up to 100%, as many adolescents reported experiences with multiple types of ADV.

Table 5 presents means and standard deviations by gender for the variables included in the study, as well as significant gender differences. Overall, males reported significantly stronger hostile sexist ( $t=7.40$ ,  $p<.001$ ) and benevolent sexist ( $t=2.57$ ,  $p<.05$ ) gender roles compared to females. Males also had significantly more supportive attitudes towards the use of both nonphysical ADV ( $t=-4.01$ ,  $p<.001$ ) and physical/sexual ADV ( $t=-5.20$ ,  $p<.001$ ) compared to females. Males reported that they were more isolated from their friends compared to females, whereas females reported that they were more isolated from community resources and transportation compared to males, though these



differences were not statistically significant. Appendix E presents the correlations between study variables.

Table 5

*Means, standard deviations, and significant gender differences for study variables*

Variable	Males	Females	t value	All Participants
Hostile Sexism	3.15(.72)	2.34(.73)	7.40***	2.67(.82)
Benevolent Sexism	3.18(.72)	2.87(.78)	2.57*	3.00(.76)
Attitudes towards nonphysical ADV	2.77(.29)	3.00(.40)	-4.01***	2.91(.37)
Attitudes towards physical/sexual ADV	3.51(.49)	3.82(.24)	-5.20***	3.69(.39)
Access to friends	4.44(.86)	4.52(.81)	-.74	4.48(.82)
Access to health services	4.78(.51)	4.79(.56)	-.33	4.77(.56)
Access to ADV resources	3.96(.97)	3.70(1.31)	1.04	3.83(1.18)
Access to transportation	4.64(.54)	4.48(.83)	1.38	4.56(.72)
Anonymity at School	10.56(2.42)	10.88(2.15)	.74	10.70(2.25)
Anonymity with Parents	18.28(3.47)	18.28(3.59)	.32	18.29(3.54)
Physical ADV	Perp= .11(.46) Vict=.54(1.31)	Perp=.08(.47) Vict=.11(.49)	Perp=.228 Vict=2.54*	Perp=.09(.46) Vict=.27(.92)
Threatening ADV	Perp=.08(.43) Vict=.13(.62)	Perp=.11(.61) Vict=.07(.41)	Perp=-.17 Vict=.56	Perp=.09(.54) Vict=.09(.49)
Relational ADV	Perp=.07(.26) Vict=.25(.62)	Perp=.05(.22) Vict=.22(.63)	Perp=.51 Vict=.64	Perp=.06(.23) Vict=.22(.62)
Sexual ADV	Perp=.02(.14) Vict=.04(.19)	Perp=.02(.22) Vict=.25(.79)	Perp=-.22 Vict=-1.96	Perp=.02(.19) Vict=.17(.63)
Emotional/Verbal ADV	Perp=.94(1.32) Vict=1.24(1.39)	Perp=1.17(1.28) Vict=1.33(1.36)	Perp=-1.03 Vict=-.47	Perp=1.08(1.29) Vict=1.29(1.36)
Cyber ADV	Perp=1.94(2.65) Vict=2.98(3.77)	Perp=2.34(3.15) Vict=2.72(3.57)	Perp=-.62 Vict=.41	Perp=2.18(2.95) Vict=2.80(3.63)

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Note: \*= $<.05$ , \*\*= $<.05$ , \*\*\*= $<.001$

## Measurement

Confirmatory Factor Analysis (CFA) is used to verify the nature of constructs (latent variables) as theorized and to assess the reliability of the measures of constructs in this study (Kline, 2016). The CFA results show that the nature of the latent constructs such as ADV victimization, gender roles, attitude towards ADV, and isolation are consistent with the research's proposition. However, results do not suggest relationships between the two underlying latent constructs of ADV perpetration and anonymity with some of their observed variables. See Appendix F for fit indices and Appendix G for measurement model factor loadings and latent variable correlations.

The standardized factor loadings for gender roles, attitudes towards ADV, and isolation were all significant, suggesting the indicators for these variables are all adequate (Brown, 2014) (Appendix G). However, indicators for the anonymity latent variable were not significant. Thus, anonymity was divided into school anonymity and parent anonymity, and each of these constructs was used as latent variables. Standardized factor loadings for school anonymity were all significant. The standardized factor loadings for parental anonymity were all significant except for item 5. This item was removed due to a low factor loading. Additionally, two sets of indicators (i.e., first and fourth, first and second) for the parental anonymity latent variable were highly correlated, and thus were allowed to correlate based on the modification indices, which improved model fit. These items that were allowed to correlate used similar vocabulary in the measure, and thus conceptually made sense correlating (Bowen, 2014).

Further examination shows the indicators for victimization all significantly relate to the latent variable (Appendix G). Two indicators for the victimization latent variable, physical and threatening, were highly correlated, indicating these two indicators are overlapping. These two items were allowed to correlate based on the modification indices, which improved model fit.

Finally, the measurement model reveals that the perpetration indicators do not load on to the perpetration latent variable adequately. The six perpetration indicators were all originally included based on the validated measure and theory regarding ADV. Three of the six indicators (i.e., relational, sexual, cyber) had low factor loadings. These three indicators were eliminated, as they did not significantly contribute to the model. The three remaining perpetration indicators (i.e., physical, threatening, emotional/verbal) were all almost 100% overlapping. Theoretically, these indicators are different. However, within this sample, they do not differentiate. The high overlap indicates that when physical ADV is perpetrated, so is verbal ADV. Additionally, the wording of the threatening ADV perpetration items pertain to physical ADV perpetration (e.g., I threatened to hit or throw something at my partner). These threatening perpetration items are also worded as a form of verbal ADV (e.g., "I threatened.."). As a result of the near 100% overlap in these three variables, the emotional/verbal ADV perpetration item was chosen to represent these three remaining ADV perpetration variables using a parsimonious model. This variable had the highest factor loading on the perpetration latent variable and had more variability in the data compared to the physical ADV and threatening ADV perpetration variables. This emotional/verbal ADV perpetration variable was used as an observed variable.

Though the full measurement model for research question 1 terminated successfully, the structural model failed to estimate, which is likely due to the low number of the valid sample participants and high number of estimates. The number of participants included in the structural model analysis was 175, which is below the recommended sample size of 200 (Kline, 1998). Subsequently, multiple simpler structural models with fewer estimates were tested for hypotheses 1a-1f. (See Appendix G and Appendix H for the CFA results of the simplified measurement models). The next section details the structural models for each of the hypotheses 1a-1f.

### Quantitative Results

**Research Question 1: Sociocultural aspects of adolescents' rural context and ADV outcomes.** Structural equation models were tested to determine the relationship between the rural context (i.e., gender roles, isolation, anonymity) and ADV outcomes (i.e., victimization, perpetration), with attitudes towards ADV as an indirect effect. Multiple models were used to test the hypothesized relationships between variables. The structural model presents the extent to which the latent variables relate to one another (Weston & Gore Jr, 2006). Table 6 presents the level of support for each hypothesis that addressed Research Question 1.

Table 6	
<i>Level of Support for Research Question 1 Hypotheses</i>	
Hypothesis	Support
<b>Hyp 1a:</b> Adolescents with more traditional gender roles will have more supportive attitudes towards ADV, which will be associated with higher rates of ADV victimization.	Part
<b>Hyp 1b:</b> Adolescents who are more isolated will be associated with higher rates of ADV victimization.	No
<b>Hyp 1c:</b> Adolescents who perceive higher anonymity will have higher rates of ADV victimization.	No

<b>Hyp 1d:</b> Adolescents with more traditional gender roles will have more supportive attitudes towards ADV, which will be associated with higher rates of ADV perpetration.	No
<b>Hyp 1e:</b> Adolescents who are more isolated will be associated with higher rates of ADV perpetration.	No
<b>Hyp 1f:</b> Adolescents who perceive higher anonymity will have higher rates of ADV perpetration.	No

***Hyp 1a: Positive relationship between gender roles and ADV victimization, with attitudes towards ADV mediating this relationship.*** A structural equation model is tested to examine the relationship between gender roles and ADV victimization, with attitudes towards ADV as an indirect effect. Figure 5 includes estimates for the full model (*measurement model* and *structural model*). Fit indices suggest acceptable model fit (see Appendix H). Gender roles ( $\beta=1.25, p>.05$ ) does not significantly predict ADV victimization, and there is no significant indirect effect between gender roles and ADV victimization through attitude towards ADV ( $\beta=0.62, p>.05$ ). However, there is a significant relationship between gender roles and attitudes toward ADV ( $\beta=-.94, p<.001$ ) (Appendix I).

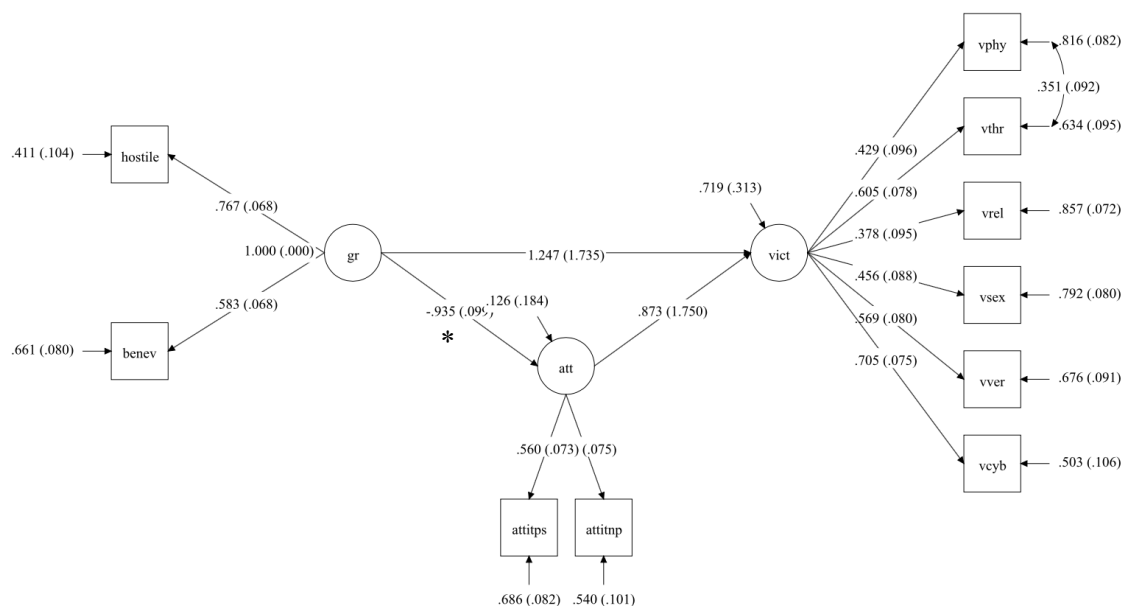


Figure 5. Full Model for ADV Victimization on Gender Roles and Attitudes towards ADV.

An alternative model was run to test Hypothesis 1a for whether gender roles significantly predicted ADV victimization with attitudes towards ADV as an indirect effect (Figure 6). For this model, gender roles was divided into *hostile sexism* and *benevolent sexism*. Attitudes towards ADV was divided into *attitudes towards nonphysical ADV* and *attitudes towards physical/sexual ADV*. This model presented more detail regarding which aspects of gender roles and attitudes towards ADV were associated with ADV victimization. Observed variables were used for *hostile sexism*, *benevolent sexism*, *attitudes towards nonphysical ADV*, and *attitudes towards physical/sexual ADV* given the study's small sample size, as suggested by Clark (2017).

Fit indices suggest that this model has decent fit (Appendix H). Hostile sexist attitudes ( $\beta = .17, p < .05$ ) significantly predict ADV victimization, but there is no

association between benevolent sexist attitudes ( $\beta=-.01, p>.05$ ) and ADV victimization. Additionally, there is no significant indirect effect with attitudes towards nonphysical ADV ( $\beta=-0.07, p>.05$ ) and attitudes towards physical/sexual ADV ( $\beta=0.06, p>.05$ ) on hostile sexist attitudes and benevolent sexist attitudes with ADV victimization. However, there are significant relationships between the gender roles and attitudes towards ADV variables. Namely, hostile sexism was significantly associated with both attitudes towards nonphysical ADV ( $\beta=-0.14, p<.001$ ) and attitudes towards physical/sexual ADV ( $\beta=-0.20, p<.001$ ). Additionally, benevolent sexism is significantly associated with attitudes towards nonphysical ADV ( $\beta=-0.14, p<.001$ ) (Appendix I). Overall, this hypothesis was in part supported.

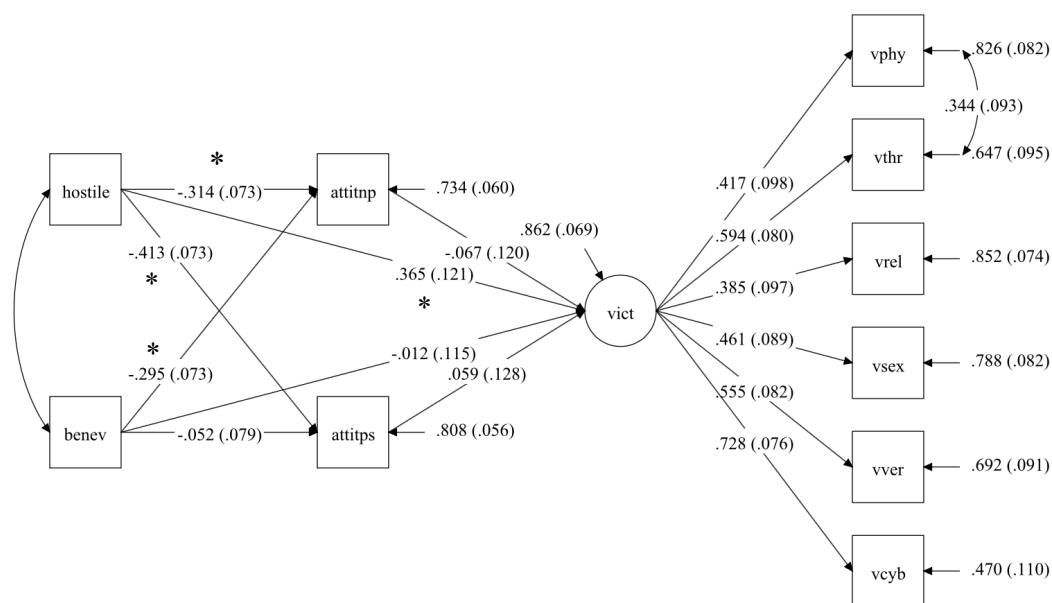


Figure 6. Full Model for ADV Victimization on Gender Roles and Attitudes towards ADV.

**Hyp 1b: Negative relationship between isolation and ADV victimization. A**

structural equation model was tested to determine the relationship between isolation and

ADV victimization. Figure 7 includes estimates for the *measurement model* and *structural model*. Fit indices suggest that this structural model has acceptable fit (Appendix H). Though the model has decent fit, there is no significant relationship between isolation and ADV victimization (Appendix I). However, the relationship between isolation and ADV victimization was in the hypothesized direction. Results from this analysis do not support the hypothesis.

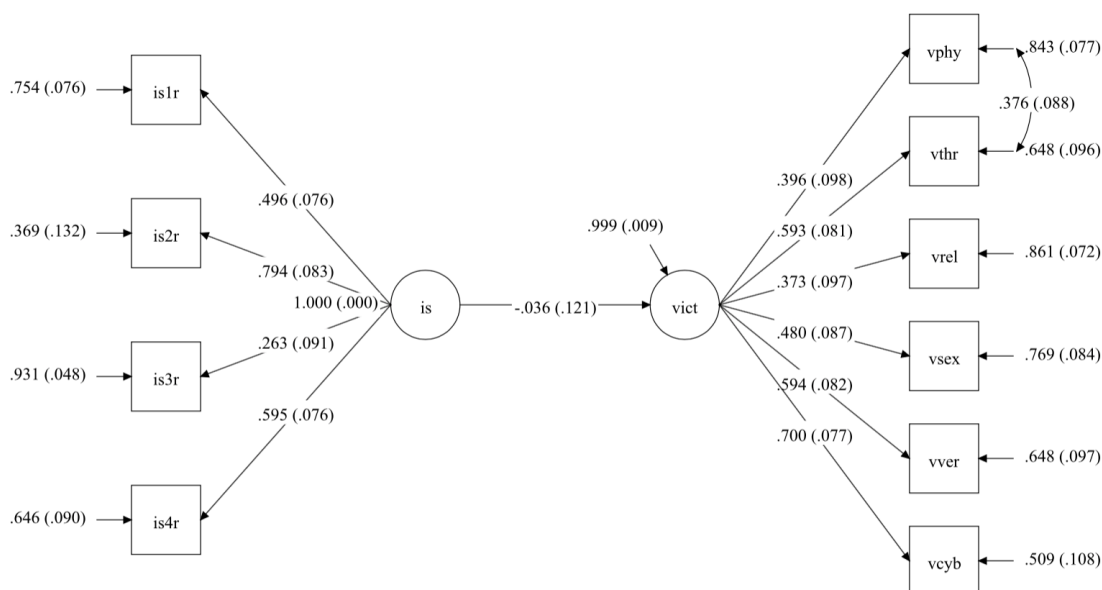


Figure 7. Full Model for ADV Victimization on Isolation.

**Hyp 1c: Negative relationship between adolescents' sense of anonymity and ADV victimization.** A structural equation model was tested to determine the relationship between sense of anonymity (parental and school) and ADV victimization. Parental anonymity and anonymity at school were used as latent variables. Figure 8 includes estimates for the *measurement model* and *structural model*. Fit indices reveal this



structural model has decent fit (Appendix H). Though the model has decent fit, results indicate that neither parental anonymity nor school anonymity significantly predict ADV victimization, indicating sense of anonymity in the rural context does not have a significant impact on adolescents' likeliness to be victimized by ADV (Appendix I). Results from this analysis do not support the hypothesis.

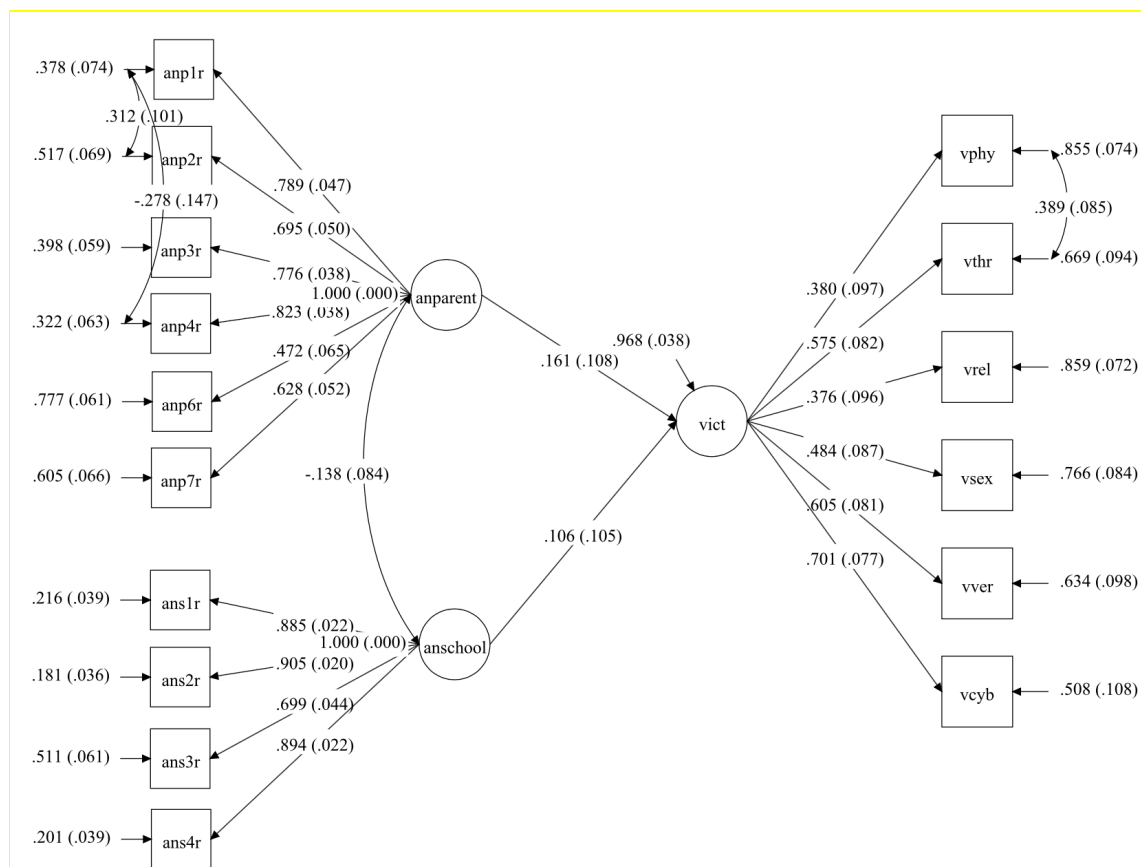


Figure 8. Full Model for ADV Victimization on Anonymity.

**Hyp 1d: Positive relationship between gender roles and ADV perpetration, with attitudes towards ADV mediating this relationship.** The structural equation model was tested to determine the relationship between gender roles and emotional/verbal ADV perpetration with attitudes towards ADV as an indirect effect. Figure 9 includes estimates for the *measurement model* and *structural model*. Fit indices suggest the structural model

has acceptable fit (Appendix H). Though the model has good fit, there are no significant associations between gender roles and emotional/verbal ADV perpetration with attitudes towards ADV as a mediator (Appendix I). Results from this analysis do not support the hypothesis.

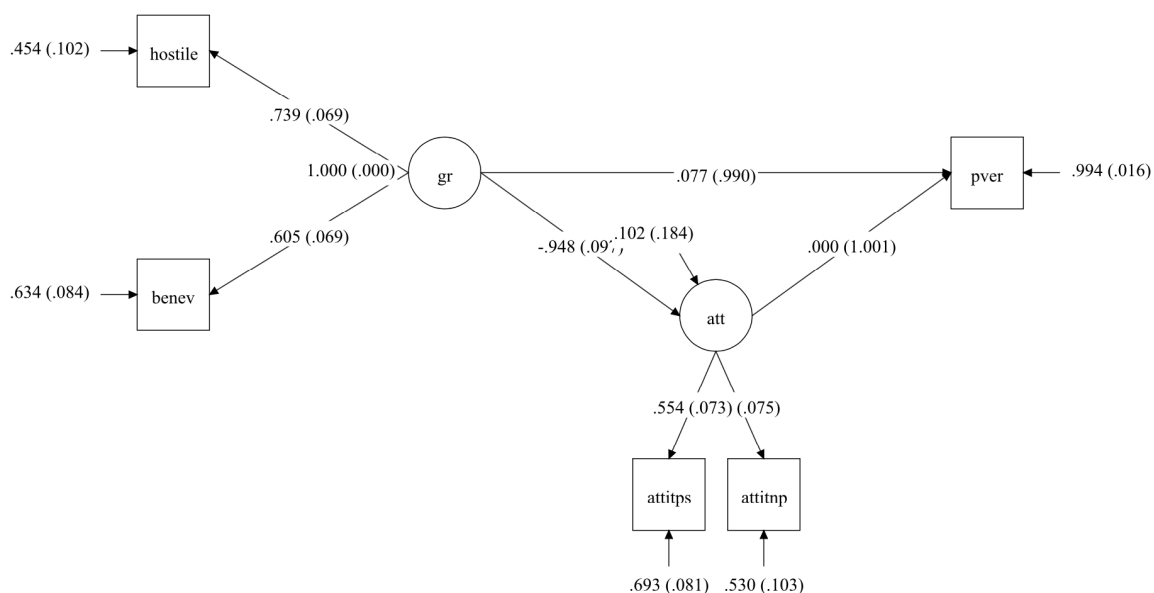


Figure 9. Full Model for Emotional/Verbal ADV Perpetration on Gender Roles and Attitudes towards ADV.

***Hyp 1e: Negative relationship between isolation and ADV perpetration.***

A structural equation model was tested to determine the relationship between isolation and emotional/verbal ADV perpetration. Figure 10 includes estimates for the *measurement model* and *structural model*. This model has acceptable fit (Appendix H). Though the model has good fit, results indicate that isolation does not significantly predict emotional/verbal ADV perpetration, indicating isolation in the rural context does not have a significant impact on adolescents' likeliness to perpetrate ADV (Appendix I). Results from this analysis do not support the hypothesis.

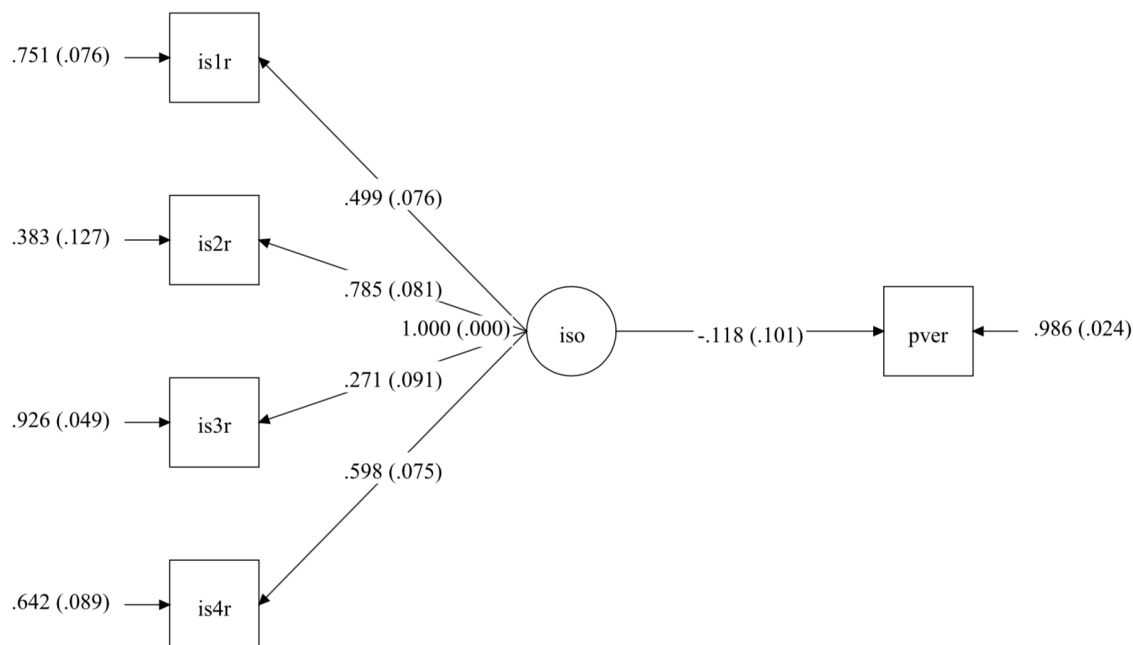


Figure 10. Full Model for Emotional/Verbal ADV Perpetration on Isolation.

**Hyp 1f: Negative relationship between adolescents' sense of anonymity and ADV perpetration.** A structural equation model was tested to determine the relationship between sense of anonymity (parental and school) and emotional/verbal ADV perpetration. Figure 11 includes estimates for the *measurement model* and *structural model*. Fit indices suggest the structural model has decent fit (Appendix H). Results indicate that neither parental anonymity nor school anonymity significantly predict emotional/verbal ADV perpetration, indicating sense of anonymity in the rural context does not have a significant impact on adolescents' likeliness to perpetrate ADV (Appendix I). Results from this analysis do not support the hypothesis.

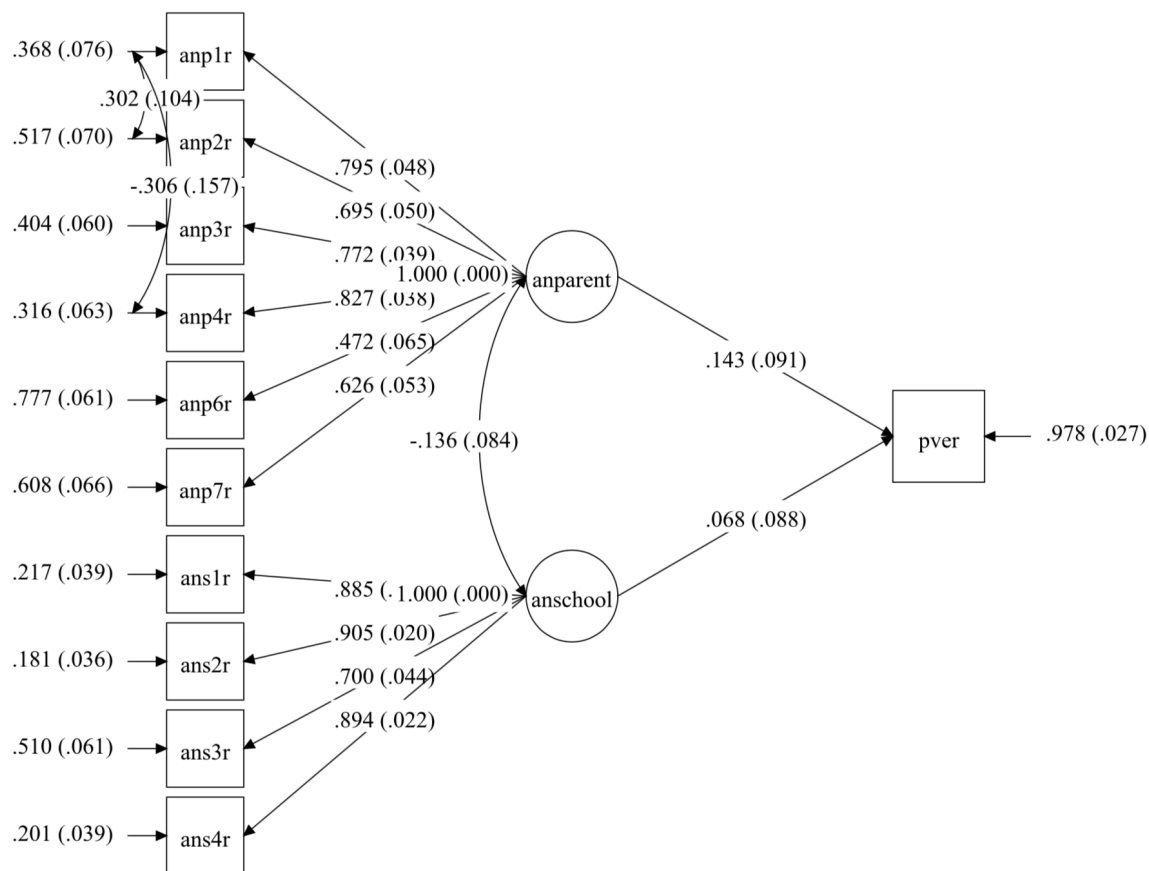


Figure 11. Full Model for Emotional/Verbal ADV Perpetration on Anonymity.

**Research Question 2. Gender interactions of sociocultural aspects of adolescents' rural context and ADV outcomes.** Originally, invariance testing was the chosen analysis to test for gender differences across the hypothesized models from research question 1. However, this model did not run successfully, as there were errors with standard errors. The smaller sample size also made the invariance test problematic and thus, this analysis was not successful. In order to still answer the second research question, gender interactions (gender moderation effects) were tested between relationships with observed variables. Table 7 presents the level of support for each hypothesis under Research Question 2.

Table 7	
<i>Level of Support for Research Question 2 Hypotheses</i>	
<b>Research Question 2</b>	<b>Support</b>
<b>Hyp 2a:</b> Female adolescents with stronger traditional gender roles will have more supportive attitudes towards ADV, which will have higher rates of ADV victimization compared to males.	Part
<b>Hyp 2b:</b> Female adolescents who are more isolated will have higher rates of ADV victimization compared to males.	Part
<b>Hyp 2c:</b> Female adolescents who perceive higher anonymity will have higher rates of ADV victimization compared to males.	No
<b>Hyp 2d:</b> Male adolescents with more traditional gender roles will have more supportive attitudes towards ADV, which will have higher rates of ADV perpetration compared to females.	No
<b>Hyp 2e:</b> Male adolescents who are more isolated will have higher rates of ADV perpetration compared to females.	Part
<b>Hyp 2f:</b> Male adolescents who perceive higher anonymity will have higher rates of ADV perpetration compared to females.	No

*Hyp 2a: Stronger relationship for females between gender roles and ADV victimization, with attitudes towards ADV as an indirect effect.* To test this hypothesis, relationships between three variables are examined separately.

1. Gender moderated relationship between gender roles and ADV victimization.
2. Gender moderated relationship between attitudes towards ADV and ADV victimization.
3. Gender moderated relationship between gender roles and attitudes towards ADV victimization.

Examining the relationships separately precisely identifies where gender is moderating in the larger model from hypothesis 1a. This specific information is relevant given the significant relationships between gender roles, attitudes towards ADV, and ADV victimization discovered in hypothesis 1a.

First, gender was examined as a moderator of the relationship between gender roles and ADV victimization. Specifically, gender roles was divided into *hostile sexism* and *benevolent sexism*, as these two constructs had varying associations with ADV victimization. For the first moderation analysis, *hostile sexism* and *gender* were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between *hostile sexism* and *gender* was entered. The addition of the interaction term did not explain a significant increase in variance in ADV victimization,  $\Delta R^2 = .00$ ,  $F(1, 126) = 0.04$ ,  $p > .05$ . Next, a moderation analysis was run with benevolent sexism. For the first step, *benevolent sexism* and *gender* were entered in the regression analysis. In the second step of the regression analysis, the interaction term between *benevolent sexism* and *gender* was entered. Consistent with hostile sexism, the addition of the interaction term did not explain a significant increase in variance in ADV victimization,  $\Delta R^2 = .01$ ,  $F(1, 123) = 1.12$ ,  $p > .05$ . Consequently, gender was not a significant moderator of the relationship between hostile sexism or benevolent sexism and ADV victimization.

Second, gender was examined as a moderator for the relationship between attitudes towards ADV and ADV victimization. Attitudes towards ADV were examined separately for *attitudes towards nonphysical ADV* and *attitudes towards physical/sexual ADV*. For the first moderation analysis, attitudes towards nonphysical ADV and gender were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between attitudes towards nonphysical ADV and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV victimization,  $\Delta R^2 = .02$ ,  $F(1, 125) = 1.45$ ,  $p > .05$ . Next, a

moderation analysis was run with attitudes towards physical/sexual ADV. For the first step, attitudes towards physical/sexual ADV and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between attitudes towards physical/sexual ADV and gender was entered. Again, the addition of the interaction term did not explain a significant increase in variance in ADV victimization,  $\Delta R^2 = .00$ ,  $F(1, 126) = 0.53$ ,  $p > .05$ . Therefore, gender was not a significant moderator of the relationship between attitudes towards nonphysical ADV or attitudes towards physical/sexual ADV and ADV victimization.

Third, gender was examined as a moderator of the relationship between gender roles (i.e., hostile and benevolent) and attitudes towards ADV. Attitudes towards ADV were examined separately for *attitudes towards nonphysical ADV* and *attitudes towards physical/sexual ADV*. Thus, four tests were run with the combination of hostile sexism, benevolent sexism, attitudes towards nonphysical ADV, and attitudes towards physical/sexual ADV. For the first moderation analysis for *attitudes towards nonphysical ADV*, hostile sexism and gender were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between hostile sexism and gender was entered. The addition of the interaction term did explain a significant increase in variance in attitudes towards non-physical ADV,  $\Delta R^2 = .04$ ,  $F(1, 154) = 7.70$ ,  $p < .05$ . Thus, gender was a significant moderator of the relationship between hostile sexism and attitudes towards nonphysical ADV,  $\beta = 0.84$ ,  $t = 2.67$ ,  $p < .01$ . Females with more hostile sexist gender roles had more supportive attitudes towards nonphysical ADV compared to males (Figure 12). This finding supports hypothesis 2a.

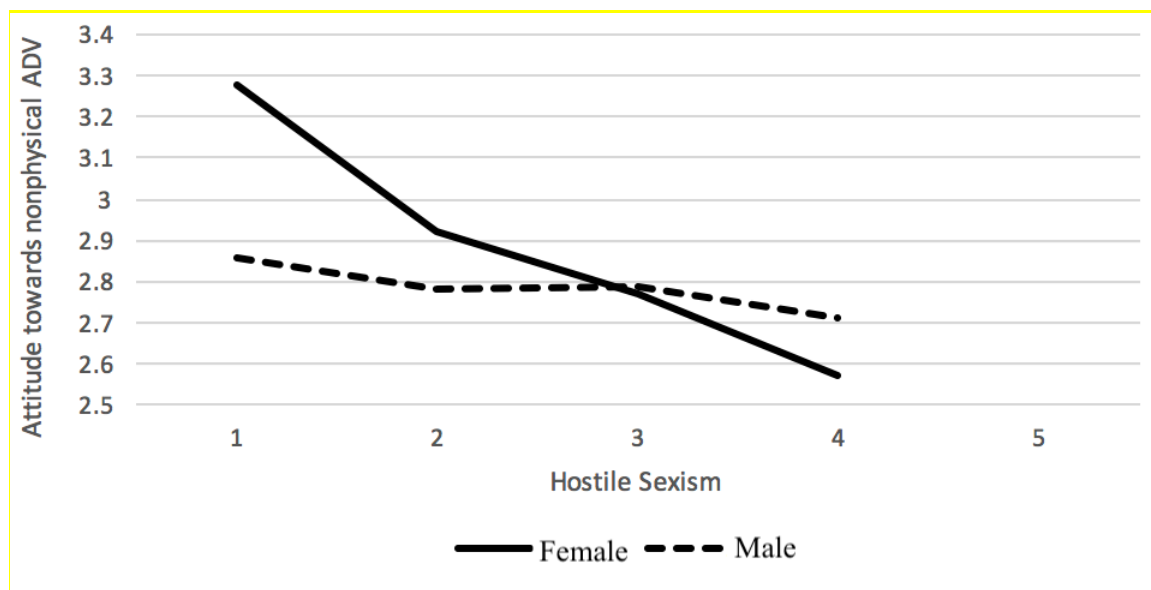
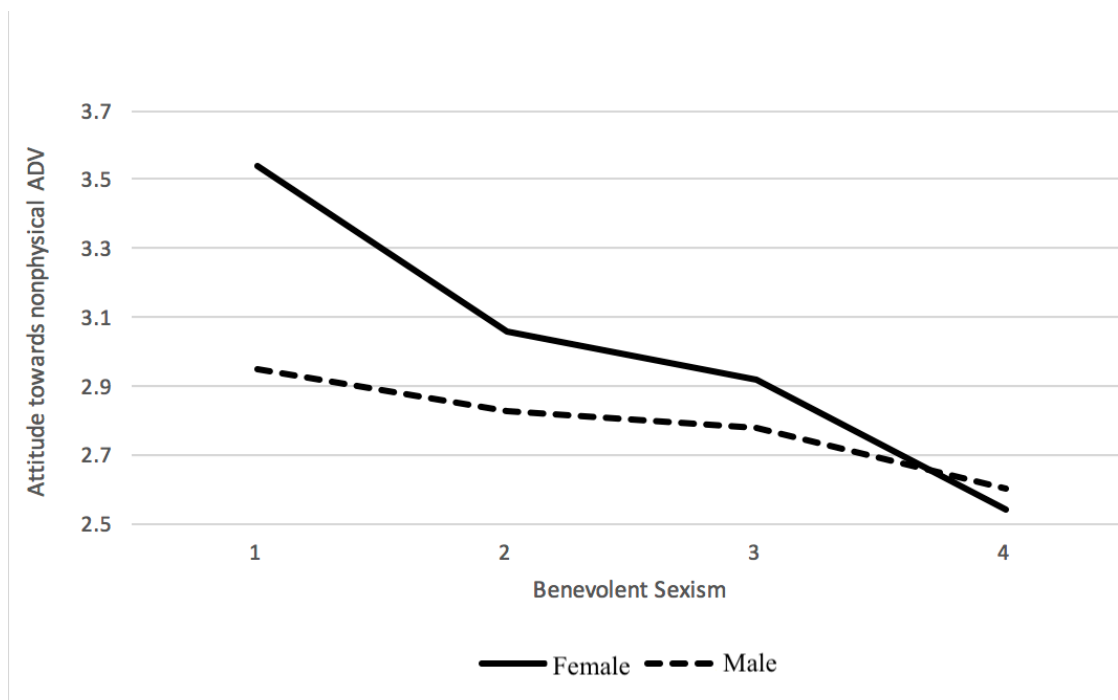


Figure 12. Gender Interaction between Hostile Sexist Gender Roles and Attitudes towards Nonphysical ADV.

For the second moderation analysis for *attitudes towards nonphysical ADV*, benevolent sexism and gender were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between benevolent sexism and gender was entered. The addition of the interaction term did explain a significant increase in variance in attitudes towards nonphysical ADV,  $\Delta R^2 = .02$ ,  $F(1, 156) = 4.11$ ,  $p < .05$ . Thus, gender was a significant moderator of the relationship between benevolent sexism and attitudes towards nonphysical ADV,  $\beta = 0.62$ ,  $t = 2.03$ ,  $p < .05$ . Females with more benevolent sexist gender roles had more supportive attitudes towards nonphysical ADV compared to males (Figure 13). This finding supports hypothesis 2a.





*Figure 13.* Gender Interaction between Benevolent Sexist Gender Roles and Attitudes towards Nonphysical ADV.

Next, a moderation analysis was run for attitudes towards physical/sexual ADV. For the first step, hostile sexism and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between hostile sexism and gender was entered. The addition of the interaction term did not explain a significant increase in variance in attitudes towards physical/sexual ADV,  $\Delta R^2 = .01$ ,  $F(1, 159) = 2.58$ ,  $p > .05$ . For the second moderation analysis for attitudes towards physical/sexual ADV, benevolent sexism and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between benevolent sexism and gender was entered. The addition of the interaction term did not explain a significant increase in variance in attitudes towards physical/sexual ADV,  $\Delta R^2 = .00$ ,  $F(1, 156) =$

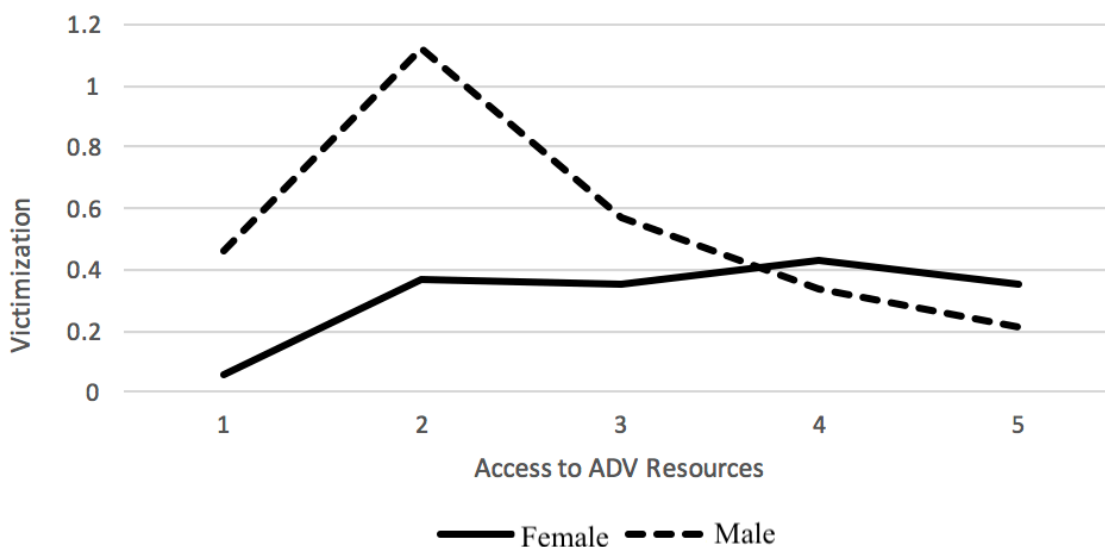
0.01,  $p > .05$ . Therefore, gender was not a significant moderator of the relationship between hostile sexism or benevolent sexism and attitudes towards physical/sexual ADV.

***Hyp 2b: Stronger relationship for females between isolation and ADV victimization.*** Gender was examined as a moderator of the relationship between isolation and ADV victimization. Specifically, isolation was examined separately for access to friends, access to health services, access to ADV resources, and access to transportation. For the first moderation analysis, access to friends and gender were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between access to friends and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV victimization,  $\Delta R^2 = .01$ ,  $F(1, 126) = 1.24$ ,  $p > .05$ . Thus, gender was not a significant moderator of the relationship between access to friends and ADV victimization.

Next, a moderation analysis was run with access to health services. For the first step, access to health services and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between access to health services and gender was entered. Consistent with access to friends, the addition of the interaction term did not explain a significant increase in variance in ADV victimization,  $\Delta R^2 = .00$ ,  $F(1, 127) = 0.00$ ,  $p > .05$ . Consequently, gender was not a significant moderator of the relationship between access to health services and ADV victimization.

Next, access to ADV resources and gender were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between access to ADV resources and gender was entered. The addition of the

interaction term did explain a significant increase in variance in ADV victimization  $\Delta R^2 = .06$ ,  $F(1, 127) = 9.08$ ,  $p < .05$ . Thus, gender was a significant moderator of the relationship between access to ADV resources and ADV victimization,  $\beta = -0.88$ ,  $t = -3.22$ ,  $p < .05$ . Females with more access to ADV resources had higher rates of ADV victimization compared to males (Figure 14). This gender interaction supports hypothesis 2b. However, the direction of the interaction is opposite compared to the hypothesized direction.



*Figure 14.* Gender Interaction between Access to ADV Resources and ADV Victimization.

Next, a moderation analysis was run with access to transportation. For the first step, access to transportation and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between access to transportation and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV victimization,  $\Delta R^2 = .02$ ,  $F(1, 127) =$

1.94,  $p > .05$ . Consequently, gender was not a significant moderator of the relationship between access to transportation and ADV victimization.

***Hyp 2c: Stronger relationship for females between sense of anonymity and ADV victimization.*** Gender was examined as a moderator of the relationship between anonymity and ADV victimization. Specifically, anonymity was examined separately for *anonymity with parents* and *anonymity at school*. For the first moderation analysis, anonymity with parents and gender were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between anonymity with parents and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV victimization,  $\Delta R^2 = .00$ ,  $F(1, 127) = 0.19$ ,  $p > .05$ . Next, a moderation analysis was run with anonymity at school. For the first step, anonymity at school and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between anonymity at school and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV victimization,  $\Delta R^2 = .01$ ,  $F(1, 127) = 1.34$ ,  $p > .05$ . Consequently, gender was not a significant moderator of the relationship between anonymity with parents or anonymity at school and ADV victimization.

***Hyp 2d: Stronger relationship for males between gender roles and ADV perpetration, with attitudes towards ADV as a mediator.*** Gender was examined as a moderator of the relationship between gender roles and ADV perpetration. Consistent with hypothesis 2a, gender roles were examined separately for hostile sexism and benevolent sexism. For the first moderation analysis, hostile sexism and gender were entered in the first step of the regression analysis. In the second step of the regression

analysis, the interaction term between hostile sexism and gender was entered. However, the addition of the interaction term did not explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .00$ ,  $F(1, 126) = 0.22$ ,  $p > .05$ . Next, a moderation analysis was run with benevolent sexism. For the first step, benevolent sexism and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between benevolent sexism and gender was entered. Consistent with hostile sexism, the addition of the interaction term did not explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .01$ ,  $F(1, 123) = 0.80$ ,  $p > .05$ . Consequently, gender was not a significant moderator of the relationship between hostile sexism or benevolent sexism and ADV perpetration.

Next, gender was examined as a moderator of the relationship between attitudes towards ADV and ADV victimization. Attitudes towards ADV were examined separately for *attitudes towards nonphysical ADV* and *attitudes towards physical/sexual ADV*. For the first moderation analysis, attitudes towards nonphysical ADV and gender were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between attitudes towards nonphysical ADV and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .01$ ,  $F(1, 125) = 1.58$ ,  $p > .05$ . Next, a moderation analysis was run with attitudes towards physical/sexual ADV. For the first step, attitudes towards physical/sexual ADV and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between attitudes towards physical/sexual ADV and gender was entered. Again, the addition of the interaction term did not explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .00$ ,  $F(1,$

126) = 0.03,  $p > .05$ . Therefore, gender was not a significant moderator of the relationship between attitudes towards nonphysical ADV or attitudes towards physical/sexual ADV and ADV victimization.

***Hyp 2e: Stronger relationship for males between isolation and ADV***

***perpetration.*** Gender was examined as a moderator of the relationship between isolation and ADV perpetration. Isolation was examined separately for access to friends, access to health services, access to ADV resources, and access to transportation. For the first moderation analysis, access to friends and gender were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between access to friends and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .01$ ,  $F(1, 126) = 0.69$ ,  $p > .05$ . Thus, gender was not a significant moderator of the relationship between access to friends and ADV perpetration. Second, a moderation analysis was run with access to health services. For the first step, access to health services and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between access to health services and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .00$ ,  $F(1, 127) = 0.20$ ,  $p > .05$ . Consequently, gender was not a significant moderator of the relationship between access to health services and ADV perpetration.

Third, a moderation analysis was run with access to ADV resources. For the first step, access to ADV resources and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between access to ADV

resources and gender was entered. The addition of the interaction term did explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .04$ ,  $F(1, 127) = 5.45$ ,  $p < .05$ . Therefore, gender was a significant moderator of the relationship between access to ADV resources and ADV perpetration,  $\beta = -0.76$ ,  $t = -2.33$ ,  $p < .05$ . Males with less access to ADV resources had higher rates of ADV perpetration compared to females (Figure 15). This finding supports hypothesis 2e.

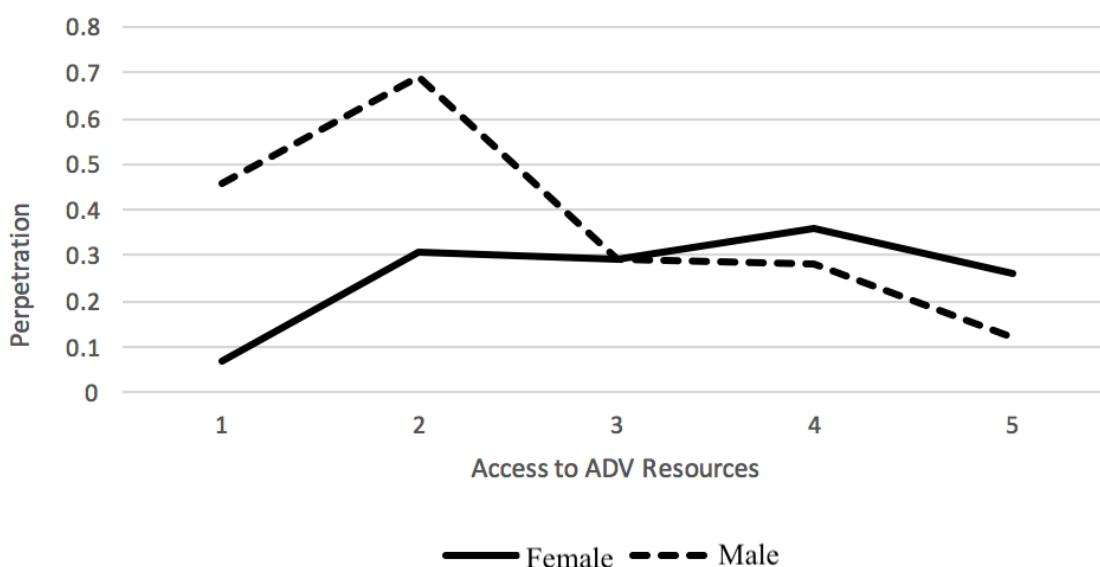


Figure 15. Gender Interaction between Access to ADV Resources and ADV Perpetration.

Fourth, a moderation analysis was run with access to transportation. For the first step, access to transportation and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between access to transportation and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .00$ ,  $F(1, 127) = 0.05$ ,  $p > .05$ . Consequently, gender was not a significant moderator of the relationship between access to transportation and ADV victimization.

***Hyp 2f: Stronger relationship for males between sense of anonymity and ADV perpetration.*** Gender was examined as a moderator of the relationship between anonymity and ADV victimization. Anonymity examined separately for *anonymity with parents* and *anonymity at school*. For the first moderation analysis, anonymity with parents and gender were entered in the first step of the regression analysis. In the second step of the regression analysis, the interaction term between anonymity with parents and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .00$ ,  $F(1, 126) = 0.08$ ,  $p > .05$ . Next, a moderation analysis was run with anonymity at school. For the first step, anonymity at school and gender were entered in the regression analysis. In the second step of the regression analysis, the interaction term between anonymity at school and gender was entered. The addition of the interaction term did not explain a significant increase in variance in ADV perpetration,  $\Delta R^2 = .00$ ,  $F(1, 126) = 0.26$ ,  $p > .05$ . Consequently, gender was not a significant moderator of the relationship between anonymity with parents or anonymity at school and ADV victimization.

### **Qualitative Findings**

**Research Question 3: Adolescents' perceptions of relationships in the rural context.** Three opened-ended questions were asked to address Research Question 3. The three questions pertained to *influences on rural adolescents' perceptions towards relationships*, *social support for adolescents' relationships*, and *adolescents' perceptions of adult awareness of adolescents' dating behaviors*. Main themes that emerged from the data pertaining to each question are described below. Table 8 presents the most common themes.



Table 8

Most Common Themes for each Question	Percent
<b>Influence on Attitudes towards Relationships</b>	
Parents	66.5
Other & extended family	28.8
Friends	17.6
Current/Previous relationships	3.5
School/teachers	2.4
<b>Social Support for Relationships</b>	
Friend	68.6
Parents	29.9
Sibling	10.9
No social support	6.6
Social media	5.1
<b>Adult Awareness of Dating Behaviors</b>	
Aware of everything	45.0
Aware of overall relationship, not specific behaviors	32.1
Very little, if any awareness	16.7
Don't know	1.0

*Note.* Percentages do not add up to 100% due to overlapping themes in participants' responses.

***Theme 1: Family and friends are the main influences on adolescents' attitudes towards relationships.***

*Parents.*

Overwhelmingly, the majority (66.5%) of participants mentioned how their mother, father, or both parents influenced their attitudes on how people should act in relationships. Reflective comments include:

“My dad has always taught me to respect women no matter what they do.”

“Seeing how strong my parents' relationship is.”

“My parents somewhat had an influence, even though they are divorced. I learned throughout my life that if I ever date, that person has to show me respect and I should too.”

“My parents’ high school sweetheart relationship.”

Some participants mentioned specific attributes that they learned from their parents, such as respect, and that these attributes impact their attitude towards relationships. For instance, one male participant responded, “The values that my mom and dad taught me, to respect a woman.” Another male participant had a similar response, “My mom and dad both taught me how to be respectful to women.” However, female participants, particularly those with male dating partners, did not report having received similar commands. A couple of female participants reported that they were taught to “seek respect” in their relationships.

Another frequently mentioned attribute learned from parents was morals. One participant said, “the way I was raised and the value[s] I have been instilled with.” Another participant explained, “Just having good morals and respect and not doing what my parents did.”

*Other/extended family.*

After *parents*, other and extended family was the next frequently mentioned influencer on adolescents’ attitudes towards relationships (28.8%). Nineteen participants (11.2%) mentioned that their grandparents had an influence on their attitudes. Others mentioned aunts and uncles. One participant explained how she used her aunt as a role model instead of her own parents, “My aunt has influenced my attitude on how people should act in relationships because my parents didn’t have the best relationship all the time.” Some participants, particularly males, mentioned their sisters. For instance, one male participant said, “My sisters have always told me, that if I disrespect a woman that they would hurt me. I only have sisters so I know to respect them and everyone else.”

*Friends.*

Some participants (17.6%) also mentioned that their friends influence their attitudes on how people should act in a relationship. Participants mentioned that watching their friends' relationships impacted their attitudes. Similarly, female participants mentioned that witnessing how relationships within their friends' families impacts their friends had an impact on what they desire for their own relationships. For instance, one participant said, "The fact that I have seen many people (friends) that have been severely affected emotionally by problems that their parents have at home due to their bad relationship." However, most participants that mentioned their friends did not specify how exactly their friends impact their attitudes.

Moreover, a few participants mentioned that social media impacts their views on how people should act in relationships. It is unclear if they refer to social media in terms of videos and articles or if they are referring to their friends' postings and pictures that they see on social media.

***Theme 2: Participants have and utilize various sources of social support for relationships.***

*Friend.*

The majority of participants mentioned that their sources of social support are friends (68.6%). Some participants mentioned that they turn to friends for social support, as they trust their friends with information about their dating behaviors. One participant mentioned that she talks to certain friends because they are not friends with her boyfriend: "I mostly talk to very close friends in whom I can trust and I know that they will keep information secret." Participants' comments indicate an aspect of secrecy and

privacy between information shared with their friends about their dating behaviors. Many participants (24%) only mentioned friends as their sources of social support.

*Family.*

Many participants mentioned that members of their family are sources of social support, specifically their parents (29.9%) or siblings (10.9%). Representative comments by participants include:

“My dad is a really good person to talk to because he knows me very well and he will take my side in most situations but he is not afraid to tell me that I am in the wrong. He usually knows how to help us work things out.”

“My mother. I call her anytime I feel overwhelmed or confused about something in my relationship.”

Participants who specified the gender of their “siblings” referred to their “sisters.” No participants specifically mentioned using their brother(s) as sources of social support.

*No social support.*

Some participants (6.6%) noted that they do not have any source of social support. Some of these participants mentioned that they directly talk to their partner, but have no other social support that they use. For example, one participant noted, “I don’t need to really talk to anybody about problems I have with my girlfriend. If I need to talk, I will talk to her about things.” Similarly, another participant said, “If I don’t have close friends around I can always just talk directly to my girlfriend.”

*Social media.*

Multiple participants (5.1%) mentioned that they use social media. It’s unclear whether participants meant they use social media to talk to their sources of social support,

or if they use social media directly as their form of support (i.e., posting about their relationship online, receiving support from friends in online posts). Nevertheless, a wide range of social media platforms were mentioned by participants, such as snapchat, Facebook, Instagram, and FaceTime.

*These 3: Adult awareness of rural adolescents' dating varies between aware of everything, minimally aware, and not aware.* The vast majority of participant comments fall into one of three categories regarding adult awareness of their physical and sexual dating behaviors: *aware of everything*, *aware they date but not aware of their specific dating behaviors*, and *not aware at all*. In general, participants did not interpret this open-ended question to pertain to psychological and verbal aspects of dating behaviors, but instead only discussed physical and sexual aspects.

*Aware of everything.*

Almost half (45.0%) of participants mentioned that the adults in their life, namely their parents, know “everything” about their relationship. For instance, one participant explained the extent her parents were aware of the physical aspects of her relationship, “Parents knew what we planned and knew I wouldn’t go too far.”

Some participants’ comments about adults’ awareness specifically relates to the rural culture: “I lived in a small community. Everyone knew.” Another participant explained how the rural culture impacts her dating behaviors:

Everyone, parents, brother, family members, employers, counselor, psychologist know about him. I previously went through 2 sexual assaults when I was 13 to 2 older men. People in my town have known about this, it’s kind of hard when

getting into relationships because I think some or majority think I am easy, until they know me.

This participants' comment exemplifies how the lack of anonymity in her community impacts the way she engages in relationships now.

Other participants mentioned how their parents did not use to be fully aware of their dating behaviors, but have become fully aware over time. One participant mentioned, "They know pretty much everything eventually." Another participant explained, "My parents know everything about my most recent dating behaviors but not my past."

*Aware they date but not specific behaviors.*

Many participants (32.1%) explained that the adults in their life know about their partner and certain details about their relationship, but are not aware of specific and intimate details of their relationships. For instance, one participant described, "My parents know that I like girls or boys, and they know when I'm dating someone. That's usually all they know." Another participant explained, "Now a days no one knows what you do behind closed doors. They only see you in public and on dinner dates. But it's never known on the other half of what they do."

Many participants' comments were rooted in them restricting adults' awareness. One participant mentioned, "They know about the relationships and the good things but not the fights and such." A few participants mentioned that their parents are unaware of the sexual intimacy details of their relationship. One participant explained, "My mom knows everything except that we have sex." Overall, this subtheme was summed up by one participant's comment: "They can know if they want to but there is a line that

shouldn't be crossed." Adolescents hold the power in the extent the adults in their life are aware of their dating behaviors; adults are informed of general dating behaviors if they want to be, but are not informed of more intimate and sexual details.

*Not aware at all.*

Approximately 16.7% of participants said that the adults in their life are not aware to any extent of their relationship behaviors. Some participants mentioned that adults do not know because they are indifferent towards their relationships. One participant said, "They don't really notice that I'm dating anyone." Another participant said, "If they don't ask, I don't tell."

## CHAPTER 5: INTEGRATION OF FINDINGS AND DISCUSSION

### Mixed Methods Integration

**Research Question 4: Rural adolescents' perceptions of relationships and ADV.** This section integrates the quantitative and qualitative findings and answers Research Question 4 regarding how adolescents' perceptions towards relationships help to explain rural ADV. First, findings related to the dependent variables, victimization and perpetration, are discussed. Then, discussion on the consistence or divergence of the quantitative results and qualitative findings is included, which is organized by rural construct predictor variables (i.e., gender roles, isolation, anonymity).

***Victimization and perpetration.*** Before discussing the hypothesized relationships, it is valuable to separately examine the dependent variables of this study. Victimization and perpetration rates were rather equal across this sample. Most participants reported victimization or perpetration in lower *frequencies* (i.e., once or twice in their relationship). However, the *percentage* of males and females experiencing victimization and perpetration in this study is higher compared to previous research among adolescents (e.g., Halpern et al., 2009; Kann et al., 2014). The waiver of parental consent and online sampling procedures may have contributed to the higher rates of ADV in this study. Previous research that reports lower ADV rates has assessed ADV experiences using in-person surveys and has required parental consent documentation (e.g., Ellis et al., 2009; Foshee et al., 2013). These research procedures may have contributed to participants not feeling completely comfortable responding honestly, even if confidentiality and anonymity were assured. Future ADV research should further explore the impact of consent and sampling procedures on reported prevalence rates.



Consistent with previous research in urban areas (Foshee et al., 2004), female adolescents experienced significantly higher rates of sexual victimization compared to male adolescents. Furthermore, findings from this study suggest that male adolescents experience higher rates of physical ADV victimization, which is consistent with recent literature in urban areas (e.g., Cascardi & Avery-Leaf, 2015). Previous research also shows that males tend to experience significantly higher rates of emotional or verbal victimization compared to females, as females tend to perpetrate this type of ADV at higher rates (particularly in heterosexual relationships) (e.g., Cascardi & Avery-Leaf, 2015). In this study, a high and comparable percentage of males (63.0%) and females (64.6%) experienced emotional/verbal ADV victimization. This finding is critical, as emotional/verbal ADV is often overlooked or viewed as less severe compared to physical or sexual ADV, especially for males. Research reveals victims of emotional/verbal ADV still experience severe physical and psychological consequences (Coker et al., 2000).

Findings pertaining to cyber ADV add to the novel body of literature and reveal that over half of both male and female participants reported perpetrating and being victimized by cyber ADV. These rates are higher than many studies measuring cyber ADV in urban areas (e.g., Korchmaros et al., 2013; Zweig et al., 2013). It should be noted that this study did not measure a comprehensive list of cyber ADV behaviors, given this form of ADV was not the focal of the study. Future research should further explore cyber ADV in rural contexts, as geographic isolation may impact instances of cyber ADV.

Although data in this study were not dyadic among partners (specifically, heterosexual partners), the equivalent ADV perpetration and victimization rates among males and females suggests there are additional instances of ADV other than merely

coercive control occurring in this rural context. Coercive control tends to be a gender issue (Johnson, 2005), but in this sample, even though the traditional gender roles were strong, both males and females reported perpetrating various forms of ADV. Johnson (2005) argues that most violence perpetrated by females is violent resistance or situational couple violence. Therefore, even though female submissiveness was viewed as important by participants, females may be using physical perpetration as a form of resistance or as a method of violence during an altercation with their partner.

Additionally, society tends to emphasize that “boys shouldn’t hit girls,” however, society overlooks the use of physical ADV against boys (Salter, 2016). Perhaps females in the rural context are not taught to respect their intimate partner to the same degree that males are. Qualitative findings did not validate females’ experiences of perpetrating violence, which may be due to potential response bias and participants not wanting to admit in words that they had perpetrated ADV. Therefore, there is a need for future scholars to collect dyadic couple data and investigate the context surrounding instances of ADV perpetration in the rural context among both males and females. Scholars should utilize Johnson’s Typology and explore whether male and female perpetration tends to occur in situations of violent resistance, situational couple violence, or coercive control.

Moreover, in this study, the ADV indicators loaded onto the victimization latent variable well. However, the indicators did not load onto the perpetration latent variable. The perpetration items successfully measured frequencies of ADV perpetration, as participants reported perpetrating all six forms of ADV. However, the items did not hold together under the latent construct. Theoretically, the six indicators should load onto the perpetration latent variable as they do with the victimization latent variable. It is unclear

why this discrepancy exists since the items assess the same behaviors. This finding suggests there is a pattern in the data that is yet to be discovered. The context of the ADV perpetration may be a contributing factor. Although the measure asked participants to respond to items in the context of an argument, it is possible that some participants responded to items in non-argument contexts, particularly the verbal abuse items. Future research should revise the measure to ensure it is evident the behaviors are being measured in argument contexts. Additionally, it is possible that forms of ADV perpetration vary depending on which type of argument context they occur (e.g., violent resistance, coercive control), which may be another reason why the forms of ADV perpetration do not load onto one latent variable. Similarly, research suggests some forms of ADV may be perpetrated in the context of “joking around.” Sears, Byers, Whelan, and Saint-Pierre (2006) indicate that adolescents often do not perceive behaviors as abusive in certain contexts, depending upon the intent of the violence. For instance, a participant may not perceive a behavior as ADV if it was perpetrated in the context of “joking around” or is perceived to demonstrate care for the partner (Sears et al., 2006). Therefore, there may be additional, complex factors that are impacting the factor loadings of the perpetration data.

Finally, the stigma of perpetrating violence may have impacted adolescents’ willingness to accurately respond to the frequency of their perpetration, which may have impacted the psychometrics of the measure. Adolescents may have challenges differentiating between the physical, threatening, and verbal items, as these items assess overlapping and similar sounding behaviors. Scholars should be aware of the language used when developing items, as adolescents in particular may struggle to differentiate

similar sounding items. Additionally, many of these behaviors may occur at the same time, which impacts the psychometrics of the measure. Overall, grouping the six forms of ADV perpetration together under one perpetration construct is not successful. A new perpetration measure needs to be developed to accurately measure ADV perpetration behaviors among the adolescent sample. Scholars should also assess the context surrounding rural ADV perpetration. Future efforts should be focused on developing a valid and reliable measure of ADV perpetration.

**Gender roles.** Participants reported stronger hostile sexist and benevolent sexist attitudes in comparison to findings in previous research (e.g., Glick & Whitehead, 2010), which may be linked to adolescence and/or the rural context. These strong gender roles are supported by the qualitative findings pertaining to *adolescents' influences on attitudes towards relationships*. Findings reveal that many male participants were taught by their parents to “respect women” and female participants were taught to “seek respect.” Comments such as these are consistent with the feminist theory, reflecting the notion that different standards and expectations exist for genders in the rural context. This finding embodies the concept of benevolent sexism which is rooted in the idea that women should be protected and cherished. Participants did not mention that their parents taught them to respect everyone, nor did female participants mention that their parents taught them to respect men; these comments were gender-one-sided. This teaching appears to be positive in nature. However, the absence of adolescents mentioning that they were taught to respect everyone (i.e., all genders) suggests that parents are reinforcing benevolent sexist attitudes among adolescents. In fact, male and female participants who mentioned that they were taught to “respect women” or “seek respect” from men reported stronger

traditional gender roles for both hostile sexism ( $M=2.91$ ;  $SD=.72$ ) and benevolent sexism ( $M=3.10$ ;  $SD=.69$ ) compared to the average gender roles across all participants ( $M=2.67$ ;  $SD=.82$  and  $M=3.00$ ;  $SD=.76$ , respectively). These participants also had higher rates of relational ADV perpetration (14.3%) and verbal ADV perpetration (71.4%) compared to participants who did not mention “respect” in their comments (5.8% and 57.3%, respectively). However, these participants who mentioned respect did not have more favorable attitudes towards ADV. Nevertheless, this finding raises the question of how these rural adolescents and their parents conceptualize respect. It is unclear if parents provide their children examples of what respect should look like and if the concept is merely understood in terms of respecting someone physically and sexually.

The structural equation modeling results reveal that having stronger hostile sexist attitudes is significantly associated with higher rates of ADV victimization. This finding was consistent for both male and female participants and is noteworthy, as male and female participants had rather equal rates of ADV victimization. This finding is supported by the intersectional feminist theory in that both males and females should be considered when studying ADV victimization. Qualitative findings from the open-ended question assessing *adolescents' influences on attitudes towards relationships* support this finding. Males' strong gender roles towards romantic partners (“My dad has always taught me to respect women no matter what they do”) may actually lead to men being disrespected and harmed. This notion that men should tolerate behaviors from women merely because they are women may keep males in unhealthy relationships. The relationship between hostile sexism and ADV was not found for perpetration, suggesting a varying dynamic for victimization and perpetration among this rural sample. There may

be different risk (e.g., low self-esteem; CDC, 2016b) and protective factors (e.g., higher levels of empathy; Vagi et al., 2013) for how gender roles impact ADV victimization and perpetration in the rural context.

Comparably, females who have strong hostile sexist attitudes may believe that their role is to be submissive and that they have a lower status compared to men. These females may be less likely to advocate for themselves or leave unhealthy relationships, as they may feel that they have no decision-making power (e.g., Lichter & McCloskey, 2004). This notion relates to the impact of power imbalances embodied by the feminist theory. The rural context oftentimes encourages people to remain in their relationships, which was demonstrated by one participant who explained that her parents' long-term "high school sweetheart relationship" influenced her attitude on how people should act in relationships. A "high school sweetheart relationship" does not necessarily imply a healthy relationship. This comment infers that adolescents seek the long-term, "true love" romance. It is unclear if adolescents perceive these relationships as ideal because they are healthy or merely because they are long-term. These two ideas are not necessarily equivalent. For both male and female adolescents, those with strong traditional gender roles may be more likely to remain in an unhealthy relationship, and thus experience more ADV.

Moreover, findings demonstrate that traditional gender roles are linked to favorable attitudes toward ADV, which is consistent with previous literature in different contexts (e.g., Davis & Greenstein, 2009). This study breaks down gender roles and attitudes towards ADV into more specific categories (e.g., hostile sexism, benevolent sexism). Findings reveal that both hostile sexist attitudes and benevolent sexist attitudes

significantly predict favorable attitude towards nonphysical ADV. Female adolescents with stronger hostile sexist attitudes and stronger benevolent sexist attitudes had significantly more supportive attitudes towards nonphysical ADV compared to males. It may be that adolescent females influenced by traditional gender roles internalize a notion that females should behave, and when they fail to do so, men have the right to utilize nonphysical ADV to keep them in control. On the other hand, female participants may also support traditional gender roles subconsciously and view verbal or emotional violence as a way for women to exert control in their relationship. Many of the nonphysical attitude items refer to relationship behaviors as permissible because it shows “true love” (e.g., “If the person you are going out with acts jealous, it shows true love”). Females with traditional gender roles may also view these nonphysical behaviors as permissible because they are used in an effort to obtain a “true love” relationship.

Additionally, hostile sexist attitudes significantly predict favorable attitude towards physical/sexual ADV. However, there were no gender differences for this relationship. In the qualitative findings, participants discussed that their values, morals, and respect impact how they interact with others. This finding in the qualitative data contradicts why many of these participants would also support the use of physical/sexual ADV. Most participants reported learning how people should act in relationships from their parents. This finding raises the question of whether participants are socialized while growing up that the use of ADV in relationships is permissible as well. To understand this finding, scholars should further explore how and what specifically rural adolescents are learning about relationships during upbringing.

Nevertheless, attitudes towards ADV did not mediate the relationship between gender roles and ADV victimization or perpetration, as it often does in previous research (e.g., Reitzel-Jaffe & Wolfe, 2001). Moreover, compared to gender roles, this study sample did not have as supportive of attitudes towards ADV compared to samples in previous research (e.g., Macgowan, 1997). It is unclear why this sample of adolescents has less favorable attitudes towards ADV when they had high traditional gender roles and high rates of ADV victimization and perpetration. However, many items on the attitudes towards ADV measure assess misconceptions about ADV, as opposed to the extent to which adolescents have favorable attitudes towards ADV. Scholars should develop a more effective measure of attitudes towards ADV among adolescents, specifically those in rural contexts that have unique sociocultural influences.

Overall, findings from this study pertaining to gender roles uniquely add to the literature and present numerous implications. First, adolescents in this rural context may be more sensitive to traditional gender roles, and these traditional gender roles may place them more at risk for ADV. Findings from this study suggest that favorable attitude towards ADV may not mediate, or have an impact on experiences of ADV, as they do in previous research with adolescents. Second, findings expand previous research by revealing that individuals with traditional gender roles are not merely perpetrators; these individuals are often victims as well. Findings suggest that society may be conveying disapproval for physical IPV perpetration against females, but the same message may not be conveyed about perpetrating physical IPV against males. This finding supports the feminist theory in that traditional gender roles, and patriarchy in general, can be detrimental for both males and females. Third, findings also reaffirm the notion that



gender roles and romantic interaction need to be further understood from the male's perspective in order to ensure healthy relationships. Particularly, future research should explore rural males' perceptions of how their upbringing impacts experiences of perpetration and victimization, as well as their perceptions surrounding the context of the violence. Fourth, findings further suggest a need for ADV prevention and intervention efforts. Primary ADV intervention targeting gender roles may be beneficial. Though this study did not find an association between traditional gender roles and ADV perpetration, other studies have (Reitzel-Jaffe & Wolfe, 2001). Ultimately, targeting gender role attitudes may help reduce ADV victimization and perpetration rates. Intervention targeting the topic of "respect," in terms of both nonphysical and physical ADV, may also be beneficial. For instance, it may be important to discuss this issue using the terminology understood by adolescents and their parents. Instead of encouraging "nonviolence" or "healthy relationships," professionals should consider detailing to parents and adolescents what "respect" and "valuing" their partner means in healthy relationships physically, psychologically and sexually. This verbiage may resonate with rural adolescents and families. Additionally, parenting education programs should consider incorporating information on the detriments of reinforcing traditional gender roles, as gender roles are largely learned through upbringing (Cherney et al., 2003).

***Isolation.*** Qualitative findings pertaining to adolescents' *social support for relationships* reveal that most adolescents perceive their friends to be social support. Some female adolescents explained that they use their friends as social support as their friends can "keep information secret" or that their friends do not associate with their partner. These comments suggest adolescents may only feel comfortable confiding in

individuals (i.e., their peers) with whom they trust to not tell anyone, particularly their partner. It is unclear why adolescents wish for certain information to be kept secret from their partners. This finding is of concern considering the high rates of ADV perpetration and victimization and suggests that many unhealthy relationships may not be appropriately addressed during adolescence. Additionally, this behavior pertains to research describing how dating during adolescence is an integral part of development which includes learning about appropriate and effective ways to interact in relationships (Meier & Allen, 2009). This finding indicates that many adolescents may not be learning how to address relationship problems in an effective and mature manner. Moreover, many adolescents reported using their parents or siblings as sources of social support. Some reported that they talk to their parents when they feel overwhelmed or confused about aspects of their relationship or need someone to give advice.

Furthermore, a portion of adolescent participants reported not having a source of social support for their relationships. Though this was a small percentage of participants (approximately 7%), it is concerning, nevertheless, considering previous research on social isolation and IPV (e.g., Maume et al., 2014). In fact, the participants in this study who reported that they had no sources of social support reported higher rates of ADV victimization and perpetration compared to the overall sample. Twenty-five percent of adolescents reporting no social support had been victimized by physical ADV (compared to 10.9% of the overall sample). Additionally, 12.5% had perpetrated physical ADV, 12.5% had perpetrated threatening ADV behaviors, and 62.5% had perpetrated cyber ADV, compared to 5.8%, 4.4%, and 54.1%, respectively, of the overall sample. Feminist theory suggests that isolation relates to powerlessness. People who lack power, also often

lack social and structural resources (Turner & Maschi, 2015). These participants may not have people in their lives that encourage healthy dating behaviors and for them to seek out healthy relationships. These participants also may not have friends or others to turn to for help if they are in unhealthy relationships. It is unclear if this trend is specific to isolation in the rural context, or merely social isolation in general. However, quantitative findings from the structural equation models do not support the relationship between isolation and higher susceptibility to ADV victimization or perpetration. Yet, gender interactions do show that females with more access to ADV resources had higher rates of ADV victimization. These participants may be aware of these ADV resources because they have experienced victimization. Contrarily, males with less access to ADV resources had higher rates of perpetration. Thus, there is a gender dynamic with how isolation impacts ADV in the rural context.

Moreover, some participants who reported no social support said that they just talk “straight to the source.” This response may indicate a healthy relationship that has open communication. However, during adolescence, young people are still developing relationship competence and learning how to interact romantically. Thus, it may be beneficial for adolescents to have social support for their romantic relationships, as social support has been found to mediate other aversive behaviors, such as bullying (Demaray & Malecki, 2003) and substance use (Wills & Cleary, 1996).

Some (6.6%) adolescents mentioned that they use social media as social support. Again, it is unclear whether participants use social media to talk to their sources of social support, or if they use social media directly as their form of support by posting about their relationship online and receiving support in their posts. Previous research finds that

many adolescents tend to post online for attention-seeking and virtual support (Edwards, 2017). This finding regarding social media is important considering the high rates of cyber ADV victimization (60.3%) and perpetration (59.5%) found in this study, as well as concern surrounding the quality of online relationships and how online communication impacts relationships (Subrahmanyam & Greenfield, 2008).

Overall, findings pertaining to isolation expand the literature and suggest numerous implications. First, most rural adolescents use their friends or family as social support for their relationships. Second, though results from the structural equation model did not reveal that more isolated adolescents had higher rates of victimization or perpetration, descriptive statistics show that adolescents who report having no source of social support experience higher rates of some forms of ADV victimization and ADV perpetration. The trend supports previous research and confirms that isolation may be an important aspect of adolescent relationship health. Future quantitative research should consider measuring isolation differently. This study's quantitative isolation measure assessed structural and resource isolation. However, the qualitative data assessed social isolation. This form of isolation (social) may be more relevant to rural ADV, warranting attention from future research. Third, given the use of social media as a form of social support and the high rates of cyber ADV, scholars should further explore how social media impacts relationships during adolescence, particularly in rural areas. Finally, findings also suggest the need for relationship education efforts to illustrate healthy, open-communication in relationships. Findings reveal that many rural adolescents do not feel comfortable opening discussing their relationships with their partners. Education efforts should provide specific examples of healthy communication.

*Anonymity.* Qualitative findings regarding *adolescents' perceptions of adult awareness of their dating behaviors* reveal that the majority of participants perceive that the adults in their life, particularly their parents, are either 1) aware of all aspects of their relationships; 2) aware they date but not aware of their specific dating behaviors; or 3) not aware of their relationship behaviors at all. Quantitative findings do not support the hypothesized relationship between more perceived anonymity and higher rates of ADV. Nevertheless, qualitative findings reveal important information for ADV research and adolescent behavioral health.

Almost half of adolescents reported that the adults in their life, particularly their parents, are aware of all aspects of their dating behaviors. This study did not collect dyadic data from participants' parents, thus, it is unclear whether parents would confirm their children's perceptions. Many participants' comments related to the lack of anonymity pertaining to their relationships in the rural context. Some participants mentioned that everyone knows about their relationship because they live in a rural town, implying a lack of anonymity. The participant that explained how it is harder for her to date because everyone in her town assumes she is "easy" as a result of her sexual assault exemplifies how less anonymity can negatively impact relationships and personal interactions. This excerpt also exemplifies how reduced anonymity can be both positive and negative, particularly in rural communities. It can be negative if the community uses past encounters to disrupt a person's outlook and potential for future interactions. However, like discussed in the isolation section, it can be positive in that awareness and offered support can potentially contribute to healthier relationship development (Adam et al., 2011), though this was not indicated in the participant's comment.

Likewise, many participants reported that the adults in their life are aware of their relationship but unaware of their specific dating behaviors. Again, adolescents' perceptions may not be consistent with their parents' actual awareness. The participants that acknowledged their teachers or employers conveyed that these adults were unaware of their dating behaviors. These adults may in fact be aware but maybe do not vocalize their awareness because they feel like they cannot intervene.

Moreover, approximately one out of every six respondents reported that the adults in their life were not aware to any extent of their relationship behaviors. These may be the participants who report having no sources of social support or who only use friends as sources of social support because they are more likely to keep their relationships a secret. These participants who reported that the adults in their life are unaware of their relationship behaviors also reported higher rates of ADV victimization and perpetration. Specifically, 23.1% have experienced physical victimization, 15.4% have experienced threatening victimization, 33.3% have experienced relational victimization, and 76.9% have experienced verbal victimization, compared to 10.9%, 4.4%, 14.8%, and 64.0%, respectively, among the overall sample. Similarly, perpetration rates for adolescents with adults not aware were 7.7% for physical, 7.7% for threatening, 7.7% for relational, and 61.5% for verbal (compared to 5.8%, 4.4%, 5.8%, and 57.3%, respectively, for the overall sample). Nevertheless, parents were not directly asked about their level of awareness. Therefore, it is difficult to accurately know how many participants who reported that the adults in their life are unaware actually have adults who are aware but are just indifferent towards their relationship. Some participants confirmed this notion by reporting that their parents do not notice or care about their relationships. It should be

acknowledged that many participants had been in college for a few months at the time of data collection so they may have perceived less awareness as a result of distance from adults.

Overall, findings pertaining to anonymity expand the literature and suggest several implications. First, this study reveals the awareness of rural parents' and their children's dating behaviors. Findings suggest that adolescents perceive varying levels of awareness among the adults in their lives, and that many adolescents perceive their parents have limited awareness of their dating relationships. Second, descriptive statistics reveal that anonymity (i.e., parents not aware) in the rural context potentially impacts the quality and well-being of adolescents' relationships in a negative way. Third, prevention and intervention should specifically target adolescents whose parents do not care or are not aware of their dating relationships. These adolescents may be particularly at risk for unhealthy dating behaviors, and adverse risk behaviors in general.

### **Limitations**

This study has several limitations that should be acknowledged. First, this study had a small sample size for the chosen method of data analysis. However, given the topic of ADV, numerous challenges arose that impacted the extent of data collection (e.g., confidentiality of participants' sensitive information, stigma of violence in rural communities). In addition to the data collection challenges, many cases had missing data. The missing data was due to numerous reasons. For instance, many adolescents had not begun dating behaviors and thus, did not complete the questions pertaining to their dating history. In addition, though the length of the survey was 11 minutes on average, many participants may have experienced fatigue, especially since there was minimal, if any,

incentive to participate in this study. Future research should consider collecting a larger sample of data if using structural equation modeling methods.

Second, the sample contained minimal diversity. The sample was largely older adolescents (i.e., 18-19 year olds), as this age group was easier to access. However, given the limited research with the adolescent population, particularly those who are younger adolescents, it was important to not exclude young participants from the analysis. The sample also contained minimal diversity in race, ethnicity, and sexual orientation. Data collected still provide information that future research can build on, especially since rates are showing rural adolescents are experiencing ADV. Findings should not be generalized to other rural areas around the United States, as this sample may have experiences unique to the Midwest. Future research on ADV should further acknowledge intersectional feminism and that various other demographic characteristics, other than those included in this study, may impact males' and females' experiences in varying ways. In other words, different intersects of groups may yield different findings. Future research should attempt to collect data among varying ethnicities, sexual orientations, and ages of adolescents. The small group of younger adolescents was showing ADV perpetration and victimization experiences. Thus, professionals and scholars should pay particular attention to the issue among this younger age group. Similarly, the primary researcher, as well as the peer researcher, were both females. Future research should consider including a male researcher in the peer checking process to more suitably attend to the male perspective.

Third, the measure for assessing ADV victimization and perpetration only assessed if adolescents had experienced any of the behaviors in their current or most



previous relationship. However, after consideration, this measure appeared to be the most relevant and appropriate given the sample and intended use. Rates of ADV victimization and perpetration are likely higher. This notion was supported by one participant explaining in the qualitative open-ended questions how her current relationship is healthy (thus, she responded with “never” having perpetrated or been victimized), but that she had been raped in previous relationships years ago. These instances of ADV victimization were not counted towards the ADV rates.

Fourth, many responses to the qualitative open-ended questions were minimal and lacking depth. Future research should explore alternative methods for collecting qualitative data among adolescents pertaining to dating and sexual experiences. These methods should be sensitive, yet gather in-depth information.

Finally, even though confidentiality and anonymity was ensured, many participants may not have felt entirely comfortable answering questions about their dating and sexual history. Thus, it may be difficult to determine the accuracy of the survey responses. Particularly, responses pertaining to attitudes towards ADV, as well as perpetration and victimization, should be interpreted with discretion.

## **Conclusion**

Overall, this study expands research on IPV in multiple ways. First, this study expands partner violence research on adolescents, including the younger adolescent group. Findings suggest younger adolescents (i.e., 13-17) are experiencing ADV and, thus, waiting until adolescents are older to provide ADV prevention and education services is overdue and a disservice to adolescent health. Second, this study explores males and females as both victims and perpetrators. Previous studies with both adolescent

and adult samples tend to view females as victims and males as perpetrators. This study adds to the ADV literature and suggests victimization and perpetration rates are comparable among males and females, yet the forms of violence they perpetrate vary. Third, this study extends work on partner violence in the rural context, particularly to the Midwest. Findings suggest that ADV is a noteworthy issue in the rural Midwest, as ADV rates from this sample are higher than previous research on ADV. Fourth, this study adds to the literature by examining how place and sociocultural factors are associated with ADV. Findings reveal that the family impacts rural adolescent relationships in both positive (e.g., providing social support) and negative (reinforcing traditional gender roles) ways. Positive associations were found between the rural context and ADV (i.e., gender roles), although some hypothesized relationships were not significant (i.e., isolation and anonymity).

In conclusion, literature has explored adult IPV in the rural context (e.g., Little, 2017; Sandberg, 2013). This study expands the rural relationship violence literature to adolescents. A high percentage of rural adolescents from this study have experienced ADV. Adolescents' gender roles predict attitudes in support of ADV, as well as ADV victimization. Findings illustrate the urgent need for ADV prevention and intervention efforts in rural areas that integrate material on traditional gender roles.

## References

- Ackerly, B., & True, J. (2008). Reflexivity in practice: Power and ethics in feminist research on international relations. *International Studies Review*, 10(4), 693-707.
- Adam, E. K., Chyu, L., Hoyt, L. T., Doane, L. D., Boisjoly, J., Duncan, G. J., ... & McDade, T. W. (2011). Adverse adolescent relationship histories and young adult health: cumulative effects of loneliness, low parental support, relationship instability, intimate partner violence, and loss. *Journal of Adolescent Health*, 49(3), 278-286.
- Ali, B., Swahn, M., & Hamburger, M. (2011). Attitudes affecting physical dating violence perpetration and victimization: Findings from adolescents in a high-risk urban community. *Violence and Victims*, 26(5), 669-683.
- Alvi, S., Schwartz, M. D., DeKeseredy, W. S., & Maume, M. O. (2001). Women's fear of crime in Canadian public housing. *Violence Against Women*, 7(6), 638-661.
- Arriaga, X. B., & Foshee, V. A. (2004). Adolescent dating violence: Do adolescents follow their friends' or their parents' footsteps? *Journal of Interpersonal Violence*, 19(2), 162-84.
- Baber, K. M., & Tucker, C. J. (2006). The social roles questionnaire: A new approach to measuring attitudes toward gender. *Sex Roles*, 54(7-8), 459-467.
- Ball, B., Rosenbluth, B., Randolph, R., & Aoki, A. (2008). *Expect respect: A school-based program for preventing teen dating violence and promoting safe and healthy relationships*. Austin, TX: SafePlace.
- Banyard, V. L., & Cross, C. (2008). Consequences of teen dating violence understanding

- intervening variables in ecological context. *Violence Against Women*, 14(9), 998-1013.
- Barber, C. F. (2008). DV against men. *Nursing Standard*, 22(51), 35–39.
- Barnett, O. W. (2000). Why battered women do not leave, part 1: External inhibiting factors within society. *Trauma, Violence, & Abuse*, 1(4), 343-372.
- Bearman, P. S., & Moody, J. (2004). Suicide and friendships among American adolescents. *American Journal of Public Health*, 94(1), 89-95.
- Beck, K. H., Shattuck, T., & Raleigh, R. (2001). A comparison of teen perceptions and parental reports of influence on driving risk. *American Journal of Health Behavior*, 25(4), 376-387.
- Bem, S. L. (1993). *The lenses of gender: Transforming the debate on sexual inequality*. New Haven: Yale University Press.
- Ben-David, S., & Schneider, O. (2005). Rape perceptions, gender role attitudes, and victim-perpetrator acquaintance. *Sex Roles*, 53(5-6), 385-399.
- Benson, S. R. (2009). Failure to arrest: A pilot study of police response to domestic violence in rural Illinois. *Am. UJ Gender Soc. Pol'y & L.*, 17, 685.
- Bergman, L. (1992). Dating violence among high school students. *Social Work*, 37(1), 21-27.
- Bianchi, S. M., & Milkie, M. A. (2010). Work and family research in the first decade of the 21<sup>st</sup> century. *Journal of Marriage and Family*, 72(3), 705-725.
- Biesenthal, L., Plocica, Z., & Sproule, L. D. (1997). *Violence against women in rural communities in Canada: Research project background*. Ottawa, ON: Department of Justice Canada.

- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., ... & Stevens, M. R. (2011). The national intimate partner and sexual violence survey: 2010 summary report. Atlanta, GA: National Center for Injury Prevention and Control. *Center for Disease Control and Prevention*.
- Blyth, D. A., Simmons, R. G., & Bush, D. (1978). The transition into early adolescence: A longitudinal comparison of youth in two educational contexts. *Sociology of Education, 51*(3), 149-162.
- Boehnke, M. (2011). Gender role attitudes around the globe: Egalitarian vs. traditional views. *Asian Journal of Social Science, 39*(1), 57-74.
- Borrajo, E., Gámez-Guadix, M., & Calvete, E. (2015). Cyber dating abuse: Prevalence, context, and relationship with offline dating aggression. *Psychological Reports, 116*(2), 565-585.
- Boulton, M. J., & Smith, P. K. (1994). Bully/victim problems in middle-school children: Stability, self-perceived competence, peer perceptions and peer acceptance. *British Journal of Developmental Psychology, 12*(3), 315-329.
- Bowen, N. K. (2014). *Requesting and using modification indices in Mplus*. Retrieved from <http://ssw.unc.edu/sswsig/sites/default/files/Modification%20Indices%20in%20Mplus%20%28NK%20Bowen%29.pdf>.
- Brines, J. (1994). Economic dependency, gender, and the division of labor at home. *American Journal of Sociology, 100*(3), 652-688.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by design and nature*. Cambridge, MA: Harvard University Press.

- Brown, T. A. (2014). *Confirmatory factor analysis for applied research*. New York: Guilford Publications.
- Bubolz, M., & Sontag, S. (1993). Human ecology theory. In P. Boss, W. Doherty, R. LaRossa, W. Schumm, & S. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 419-448). New York: Plenum.
- Caldwell, J. E., Swan, S. C., & Woodbrown, V. D. (2012). Gender differences in intimate partner violence outcomes. *Psychology of Violence, 2*(1), 42.
- Capaldi, D. M., Knoble, N. B., Shortt, J. W., & Kim, H. K. (2012). A systematic review of risk factors for intimate partner violence. *Partner Abuse, 3*(2), 231-280.
- Carrington, K., McIntosh, A., Hogg, R., & Scott, J. (2013). Rural masculinities and the internalisation of violence in agricultural communities. *International Journal of Rural Criminology, 2*(1), 3-24.
- Casas, J. F., Weigel, S. M., Crick, N. R., Ostrov, J. M., Woods, K. E., Yeh, E. A. J., & Huddleston-Casas, C. A. (2006). Early parenting and children's relational and physical aggression in the preschool and home contexts. *Journal of Applied Developmental Psychology, 27*(3), 209-227.
- Cascardi, M., & Avery-Leaf, S. (2015). Gender differences in dating aggression and victimization among low-income, urban middle school students. *Partner Abuse, 6*(4), 1-21.
- Cate, R. M., Henton, J. M., Koval, J., Christopher, F. S., & Lloyd, S. (1982). Premarital abuse: A social psychological perspective. *Journal of Family Issues, 3*(1), 79-90.
- Cauffman, E., Feldman, S. S., Jensen, L. A., & Arnett, J. J. (2000). The (un) acceptability of violence against peers and dates. *Journal of Adolescent Research, 15*(6), 652-

673.

Centers for Disease Control and Prevention. (2003). *Costs of Intimate Partner Violence Against Women in the United States*. Retrieved from:

<http://www.cdc.gov/violenceprevention/pdf/ipvbook-a.pdf>

Centers for Disease Control and Prevention. (2016a). *Understanding teen dating violence*. Retrieved from: [https://www.cdc.gov/violenceprevention/pdf/teen-](https://www.cdc.gov/violenceprevention/pdf/teen-dating-violence-factsheet-a.pdf)

[dating-violence-factsheet-a.pdf](https://www.cdc.gov/violenceprevention/pdf/teen-dating-violence-factsheet-a.pdf)

Centers for Disease Control and Prevention. (2016b). *Intimate partner violence: Risk and protective factors*. Retrieved from

<https://www.cdc.gov/violenceprevention/intimatepartnerviolence/riskprotectivefactors.html>

Cherney, I. D., Kelly-Vance, L., Gill Glover, K., Ruane, A., & Oliver Ryalls, B. (2003). The effects of stereotyped toys and gender on play assessment in children aged 18-47 months. *Educational Psychology, 23*(1), 95-106.

Chinn, P. L., & Kramer, M. K. (1999). *Theory and nursing integrated knowledge development (5<sup>th</sup> ed.)*. St. Louis: Mosby.

Clark, M. (2017). *Graphical and latent variable modeling*. Retrieved from

<https://m-clark.github.io/docs/sem/>

Coker, A., McKeown, R., Sanderson, M., Davis, K., Valois, R., & Huebner, E. (2000). Severe dating violence and quality of life among South Carolina high school students. *American Journal of Preventive Medicine, 19*(4), 220–227.

Collins, W. A. (2003). More than myth: The developmental significance of romantic

- relationships during adolescence. *Journal of Research on Adolescence*, 13(1), 1-24.
- Cornell, D., Klein, J., Konold, T., & Huang, F. (2012). Effects of validity screening items on adolescent survey data. *Psychological Assessment*, 24(1), 21.
- Covert, M. V., Tangney, J. P., Maddux, J. E., & Heleno, N. M. (2003). Shame-proneness, guilt-proneness, and interpersonal problem solving: A social cognitive analysis. *Journal of Social and Clinical Psychology*, 22(1), 1-12.
- Crenshaw, K. W. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241-1299.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks: Sage.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. Thousand Oaks: Sage.
- Crossman, R. K., Stith, S. M., & Bender, M. M. (1990). Sex role egalitarianism and marital violence. *Sex Roles*, 22(5-6), 293-304.
- Davis, S. N., & Greenstein, T. N. (2009). Gender ideology: Components, predictors, and consequences. *Annual Review of Sociology*, 35, 87-105.
- Davis, S. N., & Wills, J. B. (2010). Adolescent gender ideology socialization: Direct and moderating effects of fathers' beliefs. *Sociological Spectrum*, 30(5), 580-604.
- DeKeseredy, W., Donnermeyer, J. F., Schwartz, M. D., Tunnell, K. D., & Hall, M. (2007). Thinking critically about rural gender relations: Toward a rural masculinity crisis/male peer support model of separation/divorce sexual assault. *Critical Criminology*, 15(4), 295-311.



- DeKeseredy, W. S., & Joseph, C. (2006). Separation and/or divorce sexual assault in rural Ohio: Preliminary results of an exploratory study. *Violence Against Women, 12*(3), 301-311.
- DeKeseredy, W., & Schwartz, M. (2009). *Dangerous exits: Escaping abusive relationships in rural America*. New Brunswick: Rutgers University Press.
- Demaray, M. K., & Malecki, C. K. (2003). Perceptions of the frequency and importance of social support by students classified as victims, bullies, and bully/victims in an urban middle school. *School Psychology Review, 32*(3), 471-490.
- DeVoe, J., Krois, L., & Stenger, R. (2009). Do children in rural areas still have different access to healthcare? Results from a statewide survey of Oregon's food stamp population. *The Journal of Rural Health, 25*(1), 1-7.
- Dillon, M., & Savage, S. (2006). *Values and religion in rural America: Attitudes toward abortion and same-sex relations*. Retrieved from [https://scholars.unh.edu/cgi/viewcontent.cgi?article=1011&context=carsey&sei-redir=1&referer=https%253A%252F%252Fscholar.google.com%252Fscholar%253Fhl%253Den%2526as\\_sdt%253D0%25252C28%2526q%253DDillon%252B%252526%252BSavage%25252C%252B2006%252Brural%2526btnG%253D#search=%22Dillon%20%26%20Savage%2C%202006%20rural%22](https://scholars.unh.edu/cgi/viewcontent.cgi?article=1011&context=carsey&sei-redir=1&referer=https%253A%252F%252Fscholar.google.com%252Fscholar%253Fhl%253Den%2526as_sdt%253D0%25252C28%2526q%253DDillon%252B%252526%252BSavage%25252C%252B2006%252Brural%2526btnG%253D#search=%22Dillon%20%26%20Savage%2C%202006%20rural%22)
- Drauker, C. B., & Martsof, D. S. (2010). The role of electronic communication technology in adolescent dating violence. *Journal of Child & Adolescent Psychiatric Nursing, 23*, 133-42.
- Drijber, B. C., Reijnders, U. J., & Ceelen, M. (2013). Male victims of domestic

- violence. *Journal of Family Violence*, 28(2), 173-178.
- Driscoll, D. L., Appiah-Yeboah, A., Salib, P., & Rupert, D. J. (2007). Merging qualitative and quantitative data in mixed methods research: How to and why not. *Ecological and Environmental Anthropology (University of Georgia)*, 18.
- Dutton, D. G., Starzomski, A., & Ryan, L. (1996). Antecedents of abusive personality and abusive behavior in wife assaulters. *Journal of Family Violence*, 11(2), 113-132.
- Dutton, D. G., Van Ginkel, C., & Starzomski, A. (1995). The role of shame and guilt in the intergenerational transmission of abusiveness. *Violence and Victims*, 10(2), 121-131.
- Dutton, D. G., & White, K. R. (2013). Male victims of domestic violence. *New Male Studies: An International Journal*, 2(1), 5-17.
- Edwards, K. M. (2014). Intimate partner violence and the rural–urban–suburban divide myth or reality? A critical review of the literature. *Trauma, Violence, & Abuse*, 6(3) 359-373.
- Edwards, F. (2017). An investigation of attention-seeking behavior through social media post framing. *Athens Journal of Mass Media and Communications*, 3(1), 25-44.
- Eisner, E. W. (1998). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. Upper Saddle River, NJ: Merrill.
- Ellis, W. E., Crooks, C. V., & Wolfe, D. A. (2009). Relational aggression in peer and dating relationships: Links to psychological and behavioral adjustment. *Social Development*, 18(2), 253-269.

- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115.
- Ensminger, M. E., Forrest, C. B., Riley, A. W., Kang, M., Green, B. F., Starfield, B., & Ryan, S. (2000). The validity of measures of socioeconomic status of adolescents. *Journal of Adolescent Research*, 15(3), 392-419.
- Esbensen, F. A., Piper Deschenes, E., Vogel, R. E., West, J., Arboit, K., & Harris, L. (1996). Active parental consent in school-based research: An examination of ethical and methodological issues. *Evaluation Review*, 20(6), 737-753.
- Everitt, B. (1996). *Making sense of statistics in psychology: A second-level course*. Oxford, UK: Oxford University Press.
- Exner-Cortens, D., Eckenrode, J., & Rothman, E. (2013). Longitudinal associations between teen dating violence victimization and adverse health outcomes. *Pediatrics*, 131(1), 71-78.
- Feiring, C. (1999). Other-sex friendship networks and the development of romantic relationships in adolescence. *Journal of Youth and Adolescence*, 28(4), 495-512.
- Fernández-González, L., Wekerle, C., & Goldstein, A. L. (2012). Measuring adolescent dating violence: Development of 'conflict in adolescent dating relationships inventory' short form. *Advances in Mental Health*, 11(1), 35-54.
- Foshee, V. A., Bauman, K. E., Linder, F., Rice, J., & Wilcher, R. (2007). Typologies of adolescent dating violence: Identifying typologies of adolescent dating violence perpetration. *Journal of Interpersonal Violence*, 22(5), 498-519.
- Foshee, V. A., Benefield, T. S., Ennett, S. T., Bauman, K. E., & Suchindran, C. (2004).

- Longitudinal predictors of serious physical and sexual dating violence victimization during adolescence. *Preventive Medicine*, 39(5), 1007-1016.
- Foshee, V. A., Reyes, H. L. M., Gottfredson, N. C., Chang, L. Y., & Ennett, S. T. (2013). A longitudinal examination of psychological, behavioral, academic, and relationship consequences of dating abuse victimization among a primarily rural sample of adolescents. *Journal of Adolescent Health*, 53(6), 723-729.
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology*, 21(6), 1016-1024.
- Furman, W., & Buhrmester, D. (2009). Methods and measures: The network of relationships inventory: Behavioral systems version. *International Journal of Behavioral Development*, 33(5), 470-478.
- Furman, W., & Shaffer, L. (2003). The role of romantic relationships in adolescent development. In P. Florsheim (Ed.), *Adolescent romantic relationships and sexual behaviors: Theory, research and practical implications* (pp. 3-22). Mahwah, NJ: Lawrence Erlbaum.
- Garbarino, J. (1999). Lost boys: Why our sons turn to violence and how we can save them. *Reaching Today's Youth: The Community Circle of Caring Journal*, 3(4), 7-10.
- Garside, R., Ayres, R., Owen, M., Pearson, V. A., & Roizen, J. (2002). Anonymity and confidentiality: Rural teenagers' concerns when accessing sexual health services. *Journal of Family Planning and Reproductive Health Care*, 28(1), 23-26.
- George, J., & Stith, S. M. (2014). An updated feminist view of intimate partner violence.

*Family Process*, 53(2), 179-193.

- Gerlsma, C., & Hale, W. W. (1997). Predictive power and construct validity of the Level of Expressed Emotion (LEE) scale. Depressed out-patients and couples from the general community. *The British Journal of Psychiatry*, 170(6), 520-525.
- Gilbert, P., Pehl, J., & Allan, S. (1994). The phenomenology of shame and guilt: An empirical investigation. *British Journal of Medical Psychology*, 67(1), 23-36.
- Glick, P., & Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491.
- Glick, P., & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist*, 56(2), 109.
- Glick, P., & Whitehead, J. (2010). Hostility toward men and the perceived stability of male dominance. *Social Psychology*, 41, 177-185.
- Haberyan, A., & Kibler, J. (2008). Physical violence in rural and urban midwestern adolescent dating relationships. *Psychology Journal*, 5(3), 158-164.
- Halpern, C. T., Spriggs, A. L., Martin, S. L., & Kupper, L. L. (2009). Patterns of intimate partner violence victimization from adolescence to young adulthood in a nationally representative sample. *Journal of Adolescent Health*, 45(5), 508-516.
- Hardesty, J. L., Crossman, K. A., Haselschwerdt, M. L., Raffaelli, M., Ogolsky, B. G., & Johnson, M. P. (2015). Toward a standard approach to operationalizing coercive control and classifying violence types. *Journal of Marriage and Family*, 77(4), 833-843.
- Harnois, C. E. (2012). *Feminist measures in survey research*. Thousand Oaks: Sage.

- Harper, F. W., Austin, A. G., Cercone, J. J., & Arias, I. (2005). The role of shame, anger, and affect regulation in men's perpetration of psychological abuse in dating relationships. *Journal of Interpersonal Violence, 20*(12), 1648-1662.
- Hawk, S. T., Keijsers, L., Frijns, T., Hale III, W. W., Branje, S., & Meeus, W. (2013). "I still haven't found what I'm looking for": Parental privacy invasion predicts reduced parental knowledge. *Developmental Psychology, 49*(7), 1286.
- Henderson, J. W., & Taylor, B. A. (2003). Rural isolation and the availability of hospital services. *Journal of Rural Studies, 19*(3), 363-372.
- Hill, J. P., & Lynch, M. E. (1983). The intensification of gender-related role expectations during early adolescence. In J. Brooks-Gunn & A. C. Petersen (Eds.), *Girls at puberty* (pp. 201-228). New York: Springer US.
- Holtzworth-Munroe, A., Meehan, J. C., Herron, K., Rehman, U., & Stuart, G. L. (2000). Testing the Holtzworth-Munroe and Stuart (1994) batterer typology. *Journal of Consulting and Clinical Psychology, 68*(6), 1000.
- Jiwani, Y., Moore, S., & Kachuk, P. (1998). *Rural women and violence: A study of two communities in British Columbia*. Vancouver, BC: FREDA Centre for Research on Violence against Women and Children.
- Johnson, M. P. (2005). Domestic violence: it's not about gender—or is it?. *Journal of Marriage and Family, 67*(5), 1126-1130.
- Johnson, M. P. (2008). *A typology of domestic violence: Intimate terrorism, violence resistance, and situational couple violence*. Boston, MA: Northeastern University Press.
- Joreskog, K. G. (1999). *How large can a standardized coefficient be?* Retrieved from

<http://www.ssicentral.com/lisrel/techdocs/HowLargeCanaStandardizedCoefficientbe.pdf>

- Kann, L., Kinchen, S., Shanklin, S. L., Flint, K. H., Kawkins, J., Harris, W. A., ... & Whittle, L. (2014). Youth risk behavior surveillance—United States, 2013. *MMWR Surveill Summ*, 63(Suppl 4), 1-168.
- Karofsky, P. S., Zeng, L., & Kosorok, M. R. (2001). Relationship between adolescent–parental communication and initiation of first intercourse by adolescents. *Journal of Adolescent Health*, 28(1), 41-45.
- Kelly, J. B., & Johnson, M. P. (2008). Differentiation among types of intimate partner violence: Research update and implications for interventions. *Family Court Review*, 46(3), 476-499.
- Kesselman, A., McNair, L. D., & Schniedewind, N. (2008). *Women: Images and realities. A multicultural anthology* (4<sup>th</sup> ed.). Boston: McGraw-Hill.
- Kimball, M. M. (1995). *Feminist visions of gender similarities and differences*. Haworth Press: Binghampton: NY.
- Kinsfogel, K. M., & Grych, J. H. (2004). Interparental conflict and adolescent dating relationships: Integrating cognitive, emotional, and peer influences. *Journal of Family Psychology*, 18(3), 505.
- Klein, A., Brown, M., Small, M., Tucker, D., Fischer, R., & Walsh, C. (2009). *Evaluation of the rural IPV and child victimization grant program special initiative: Faith-based and community organization pilot program*. Retrieved from: <https://www.ncjrs.gov/pdffiles1/nij/grants/228192.pdf>

- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York: Guilford.
- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4<sup>th</sup> ed.). New York: Guilford.
- Korchmaros, J. D., Ybarra, M. L., Langhinrichsen-Rohling, J., Boyd, D., & Lenhart, A. (2013). Perpetration of teen dating violence in a networked society. *Cyberpsychology, Behavior, and Social Networking, 16*(8), 561-567.
- Kuckartz, U. (2001). MAXqda: Max Qualitative Data Analysis. Reference Manual. *VERBI Software, Berlin, Germany*.
- Lanier, C., & Maume, M. O. (2009). Intimate partner violence and social isolation across the rural/urban divide. *Violence Against Women, 15*(11), 1311-1330.
- Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive behavior, 29*(3), 202-214.
- Lee, M. S., Begun, S., DePrince, A. P., & Chu, A. T. (2016). Acceptability of dating violence and expectations of relationship harm among adolescent girls exposed to intimate partner violence. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(4), 487.
- Leskela, J., Dieperink, M., & Thuras, P. (2002). Shame and posttraumatic stress disorder. *Journal of Traumatic Stress, 15*(3), 223-226.
- Lichter, E. L., & McCloskey, L. A. (2004). The effects of childhood exposure to marital violence on adolescent gender-role beliefs and dating violence. *Psychology of Women Quarterly, 28*(4), 344-357.



- Little, J. (2017). Understanding domestic violence in rural spaces: A research agenda. *Progress in Human Geography*, *41*(4) 472–488.
- Logan, T. K., Shannon, L., & Walker, R. (2005). Protective orders in rural and urban areas: A multiple perspective study. *Violence Against Women*, *11*(7), 876-911.
- Logan, T. K., Walker, R., Cole, J., Ratliff, S., & Leukefeld, C. (2003). Qualitative differences among rural and urban intimate violence victimization experiences and consequences: A pilot study. *Journal of Family Violence*, *18*(2), 83-86.
- Loseke, D. R., & Kurz, D. (2005). Men's violence toward women is the serious social problem. *Current Controversies on Family Violence*, *2*, 79-96.
- Lyndon, A., Bonds-Raacke, J., & Cratty, A. D. (2011). College students' Facebook stalking of ex-partners. *Cyberpsychology, Behavior, and Social Networking*, *14*(12), 711-716.
- Macgowan, M. J. (1997). An evaluation of a dating violence prevention program for middle school students. *Violence and Victims*, *12*(3), 223-235.
- Malamuth, N. M., Sockloskie, R. J., Koss, M. P., & Tanaka, J. S. (1991). Characteristics of aggressors against women: testing a model using a national sample of college students. *Journal of Consulting and Clinical Psychology*, *59*(5), 670.
- Manning, W. D., Giordano, P. C., & Longmore, M. A. (2006). Hooking up: The relationship contexts of "nonrelationship" sex. *Journal of Adolescent Research*, *21*(5), 459–483.
- Marks, J. L., Lam, C. B., & McHale, S. M. (2009). Family patterns of gender role attitudes. *Sex Roles*, *61*(3-4), 221-234.
- Maume, M. O., Lanier, C. L., Hossfeld, L. H., & Wehmann, K. (2014). Social isolation

- and weapon use in intimate partner violence incidents in rural areas. *International Journal of Rural Criminology*, 2(2), 244-267.
- McDonnell, J., Ott, J., & Mitchell, M. (2010). Predicting dating violence victimization and perpetration among middle and high school students in a rural southern community. *Children and Youth Services Review*, 32(10), 1458-1463.
- McHugh, M. C., & Frieze, I. H. (1997). The measurement of gender role attitudes: A review and Commentary. *Psychology of Women Quarterly*, 21(1), 1-16.
- Meier, A., & Allen, G. (2009). Romantic relationships from adolescence to young adulthood: Evidence from the National Longitudinal Study of Adolescent Health. *The Sociological Quarterly*, 50(2), 308-335.
- Melander, L. A. (2010). College students' perceptions of intimate partner cyber harassment. *Cyberpsychology, Behavior, and Social Networking*, 13(3), 263-268.
- Merriam, S.B. (2009). *Qualitative Research. A Guide to Design and Implementation*. San Francisco, CA: Jossey-Bass.
- Merritt-Gray, M., & Wuest, J. (1995). Counteracting and breaking free: The process of leaving revealed through women's voices. *Health Care for Women International*, 16(5), 399-412.
- Merten, M. J., & Williams, A. L. (2009). Acceptability of marital violence among college men and women: Does gender and current relationship status matter? *College Student Journal*, 43(3), 843-851.
- Molidor, C., & Tolman, R. M. (1998). Gender and contextual factors in adolescent dating violence. *Violence Against Women*, 4(2), 180-194.
- Monk, A. (2000). The influence of isolation on stress and suicide in rural areas: An

- international comparison. *Rural Society*, 10(3), 393-403.
- Montañés, P., Lemus, S. D., Moya, M., Bohner, G., & Megías, J. L. (2013). How attractive are sexist intimates to adolescents? The influence of sexist beliefs and relationship experience. *Psychology of Women Quarterly*, 37(4), 494-506.
- Morelli, M., Bianchi, D., Baiocco, R., Pezzuti, L., & Chirumbolo, A. (2016). Not-allowed sharing of sexts and dating violence from the perpetrator's perspective: The moderation role of sexism. *Computers in Human Behavior*, 56, 163-169.
- Morgan, W., & Wells, M. (2016). 'It's deemed unmanly': Men's experiences of intimate partner violence (IPV). *The Journal of Forensic Psychiatry & Psychology*, 27(3), 404-418.
- Moscovici, S. (1984). The phenomenon of social representations. In R. Farr & S. Moscovici (Eds.), *Social representations* (pp. 3-69). Cambridge: Cambridge University.
- Muehlenhard, C. L., & Linton, M. A. (1987). Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Counseling Psychology*, 34(2), 186.
- Muthen, L. K. & Muthen, B. O. (2015). *Mplus user's guide* (7<sup>th</sup> ed.). Los Angeles, CA: Muthen & Muthen.
- National Council on State Legislatures. (2016). *Injury prevention legislation database*. Retrieved from: <http://www.ncsl.org/research/health/injury-prevention-legislation-database.aspx>.
- National Rural Health Association. (2016). *Rural health issues: Implications for rural*

*healthy people 2020*. Retrieved from

[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwi-tfHA0P\\_JAhWGRSYKHY25DpAQFggiMAA&url=http%3A%2F%2Fwww.ruralhealthweb.org%2Fdownload.cfm%3Fdownloadfile%3D37F1DE3E-3048-651A-FEA203DE7ED16E47&usg=AFQjCNEjaoodVVnUDaw196mb7kOZJb21Og&sig2=i4CJ4XMQQdQZT-XkfZSLJA&cad=rja](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwi-tfHA0P_JAhWGRSYKHY25DpAQFggiMAA&url=http%3A%2F%2Fwww.ruralhealthweb.org%2Fdownload.cfm%3Fdownloadfile%3D37F1DE3E-3048-651A-FEA203DE7ED16E47&usg=AFQjCNEjaoodVVnUDaw196mb7kOZJb21Og&sig2=i4CJ4XMQQdQZT-XkfZSLJA&cad=rja)

O'Keefe, M. A. (1997). Predictors of dating violence among high school students.

*Journal of Interpersonal Violence, 12*(4), 546-568.

Park, S. Y. (2009). An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-learning. *Journal of Educational Technology & Society, 12*(3), 150.

Peek-Asa, C., Wallis, A., Harland, K., Beyer, K., Dickey, P., & Saftlas, A. (2011). Rural disparity in IPV prevalence and access to resources. *Journal of Women's Health, 20*(11), 1743-1749.

Phillips, S. R. (1994). Asking the sensitive question: The ethics of survey research and teen sex. *IRB: Ethics & Human Research, 16*(6), 1-7.

Picard, P. (2007). *Tech abuse in teen relationships*. Chicago, IL: Teen Research Unlimited. Retrieved from <http://www.loveisrespect.org/wp-content/uploads/2009/03/liz-claiborne-2007-tech-relationship-abuse.pdf>.

Plano Clark, V. L., & Creswell, J. W. (2008). *The mixed methods reader*. Thousand Oaks: Sage.

Pruitt, L. R. (2008). Place matters: Domestic violence and rural difference. *Wis. JL*

*Gender, & Soc'y*, 23, 347.

- Radziszewska, B., Richardson, J. L., Dent, C. W., & Flay, B. R. (1996). Parenting style and adolescent depressive symptoms, smoking, and academic achievement: Ethnic, gender, and SES differences. *Journal of Behavioral Medicine*, 19(3), 289-305.
- Raphael, J. (2001). Public housing and domestic violence. *Violence Against Women*, 7(6), 699-706.
- Raykov, T., & Marcoulides, G. A. (2006). *A first course in structural equation modeling*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Reed, L. A., Tolman, R. M., & Safyer, P. (2015). Too close for comfort: Attachment insecurity and electronic intrusion in college students' dating relationships. *Computers in Human Behavior*, 50, 431-438.
- Reidy, D. E., Kearns, M. C., Houry, D., Valle, L. A., Holland, K. M., & Marshall, K. J. (2016). Dating violence and injury among youth exposed to violence. *Pediatrics*, 137(2), 1-8.
- Reingle, J. M., Jennings, W. G., Connell, N. M., Businelle, M. S., & Chartier, K. (2014). On the pervasiveness of event-specific alcohol use, general substance use, and mental health problems as risk factors for intimate partner violence. *Journal of Interpersonal Violence*, 29(16), 2951-2970.
- Reitzel-Jaffe, D., & Wolfe, D. A. (2001). Predictors of relationship abuse among young men. *Journal of Interpersonal Violence*, 16(2), 99-115.
- Reyes, H. L. M., Foshee, V. A., Niolon, P. H., Reidy, D. E., & Hall, J. E. (2016). Gender role attitudes and male adolescent dating violence perpetration: Normative beliefs

- as moderators. *Journal of Youth and Adolescence*, 45(2), 350-360.
- Rezek, J. (2010). Gender role patterns: How they factor into support systems for young mothers in rural Appalachia. *Journal of Appalachian Studies*, 16(1/2), 131-143.
- Richardson, J. L., Radziszewski, B., Dent, C. & Flay, B. (1993). Relationship between after-school care of adolescents and substance use, risk taking, depressed mood and academic achievement. *Pediatrics*, 92, 32-38.
- Riddell, T., Ford-Gilboe, M., & Leipert, B. (2009). Strategies used by rural women to stop, avoid, or escape from intimate partner violence. *Health Care for Women International*, 30(1-2), 134-159.
- Riggs, D. S., & O'Leary, K. D. (1996). Aggression between heterosexual dating partners an examination of a causal model of courtship aggression. *Journal of Interpersonal Violence*, 11(4), 519-540.
- Riley, S. C. (2003). The management of the traditional male role: A discourse analysis of the constructions and functions of provision. *Journal of Gender Studies*, 12(2), 99-113.
- Salter, M. (2016). 'Real men don't hit women': Constructing masculinity in the prevention of violence against women. *Australian & New Zealand Journal of Criminology*, 49(4), 463-479.
- Sampson, R. J., & Wilson, W. J. (1995). Toward a theory of race, crime, and urban inequality. In J. Hagan and R. D. Peterson (Eds), *Crime and inequality* (37-56). Stanford, CA: Stanford University Press.
- Sanci, L. A., Sawyer, S. M., Weller, P. J., Bond, L. M., & Patton, G. C. (2004). Youth

- health research ethics: Time for a mature-minor clause?. *Medical Journal of Australia*, 180(7), 336.
- Sandberg, L. (2013). Backward, dumb, and violent hillbillies? Rural geographies and intersectional studies on intimate partner violence. *Affilia*, 28(4), 350-365.
- Santelli, J. S., Rosenfeld, W. D., DuRant, R. H., Dubler, N., Morreale, M., English, A., & Rogers, A. S. (1995). Guidelines for adolescent health research: A position paper of the Society for Adolescent Medicine. *Journal of Adolescent Health*, 17(5), 270-276.
- Sargent, K. S., Krauss, A., Jouriles, E. N., & McDonald, R. (2016). Cyber victimization, psychological intimate partner violence, and problematic mental health outcomes among first-year college students. *Cyberpsychology, Behavior, And Social Networking*, 19(9), 545-550.
- Sears, H. A., Byers, E. S., Whelan, J. J., & Saint-Pierre, M. (2006). "If it hurts you, then it is not a joke": Adolescents' ideas about girls' and boys' use and experience of abusive behavior in dating relationships. *Journal of Interpersonal Violence*, 21, 1191-1207.
- Shannon, L., Logan, T., Cole, J., & Medley, K. (2006). Help-seeking and coping strategies for intimate partner violence in rural and urban women. *Violence & Victims*, 21(2), 167-172.
- Shaw, C. R., & McKay, H. D. (1942). *Juvenile delinquency and urban areas*. Chicago, Ill: University of Chicago Press.
- Shorey, R. C., Sherman, A. E., Kivisto, A. J., Elkins, S. R., Rhatigan, D. L., & Moore, T.

- M. (2011). Gender differences in depression and anxiety among victims of intimate partner violence: The moderating effect of shame proneness. *Journal of Interpersonal Violence, 26*(9), 1834-1850.
- Silverman, J., Rai, A., Mucci, L., & Hathaway, J. (2001). Dating violence against adolescent girls and associated substance abuse, unhealthy weight control, sexual risk behavior, pregnancy, and suicidality. *Journal of the American Medical Association, 286*(5), 572-579.
- Slep, A. M., Cascardi, M., Avery-Leaf, S., & O'Leary, K. D. (2001). Two new measures of attitudes about the acceptability of teen dating aggression. *Psychological Assessment, 13*(3), 306-318.
- Soper, D. S. (2017). *A-priori sample size calculator for structural equation models [Software]*. Available from <http://www.danielsoper.com/statcalc>
- Spencer, G. A., & Bryant, S. A. (2000). Dating violence: A comparison of rural, suburban, and urban teens. *Journal of Adolescent Health, 27*(5), 302-305.
- Stonard, K. E., Bowen, E., Lawrence, T. R., & Price, S. A. (2014). The relevance of technology to the nature, prevalence and impact of adolescent dating violence and abuse: A research synthesis. *Aggression and Violent Behavior, 19*(4), 390-417.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The conflict tactics (CT) scales. *Journal of Marriage and the Family, 75*-88.
- Struve, J. (1990). Dancing with the patriarchy. In M. Hunter (Ed.), *The sexually abused male: Prevalence, impact, and treatment* (pp. 345). Lexington, MA: Lexington Books.
- Stuart, G. L., Temple, J. R., Follansbee, K. W., Bucossi, M. M., Hellmuth, J. C., &



- Moore, T. M. (2008). The role of drug use in a conceptual model of intimate partner violence in men and women arrested for domestic violence. *Psychology of Addictive Behaviors, 22*, 12–24.
- Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. *The Future of Children, 18*(1), 119-146.
- Sugarman, D. B., & Frankel, S. L. (1996). Patriarchal ideology and wife-assault: A meta-analytic review. *Journal of Family Violence, 11*(1), 13-40.
- Taft, C. T., Kaloupek, D. G., Schumm, J. A., Marshall, A. D., Panuzio, J., & Keane, T. M. (2007). Posttraumatic stress disorder symptoms, physiological reactivity, alcohol problems, and aggression among military veterans. *Journal of Abnormal Psychology, 116*(3), 498–507.
- Thomas, S. A. (2009). *Beyond crime quantities: A multilevel analysis of the relative prevalence of interracial violence*. (Unpublished doctoral dissertation). Louisiana State University: Baton Rouge.
- Tolman, R. M. (1989). The development of a measure of psychological maltreatment of women by their male partners. *Violence and Victims, 4*(3), 159-177.
- Touliatos, J., Perlmutter, B. F., & Straus, M. A. (2001). *Handbook of family measurement techniques: Abstracts* (Vol. 1). Thousand Oaks: Sage.
- Turner, S. G., & Maschi, T. M. (2015). Feminist and empowerment theory and social work practice. *Journal of Social Work Practice, 29*(2), 151-162.
- U.S. Census Bureau. (2016). *2011-2015 American Community Survey 5-Year Estimates*. Retrieved from [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml)

- United States Department of Agriculture Rural Division. (2017). *Business & industry loan guarantees*. Retrieved from <https://www.rd.usda.gov/programs-services/business-industry-loan-guarantees>
- United States Department of Agriculture Economic Research Service. (2016). *Nebraska*. Retrieved from [https://www.ers.usda.gov/webdocs/DataFiles/53180/25582\\_NE.pdf?v=39329](https://www.ers.usda.gov/webdocs/DataFiles/53180/25582_NE.pdf?v=39329)
- Vagi, K. J., Rothman, E. F., Latzman, N. E., Tharp, A. T., Hall, D. M., & Breiding, M. J. (2013). Beyond correlates: A review of risk and protective factors for adolescent dating violence perpetration. *Journal of Youth and Adolescence*, 42(4), 633-649.
- Van Wyk, J. A., Benson, M. L., Fox, G. L., & DeMaris, A. (2003). Detangling individual-, partner-, and community-level correlates of partner violence. *Crime & Delinquency*, 49(3), 412-438.
- Vespa J. (2009). Gender ideology construction: A life course and intersectional approach. *Gender & Society*, 23(3), 262-287.
- Vezina, J., & Hebert, M. (2007). Risk factors for victimization in romantic relationships of young women: A review of empirical studies and implications for prevention. *Trauma, Violence, & Abuse*, 8(1), 33-66.
- Voyce, M. (2014). Family provision, the family farm and rural patriarchy: Three actors in search of a play. *Deakin L. Rev.*, 19, 347.
- Websdale, N. (1998). *Rural woman battering and the justice system, an ethnography*. Thousand Oaks: Sage.
- Websdale, N., & Johnson, B. (1997). The policing of domestic violence in rural and urban areas: The voices of battered women in Kentucky. *Policing and Society: An*

*International Journal*, 6(4), 297-317.

- Weithorn, L. A., & Scherer, D. G. (1994). Children's involvement in research participation decisions: Psychological considerations. In M. A. Grodin & L. H. Glanz (Eds), *Children as research subjects: Science, ethics, and law*. New York: Oxford University Press.
- Wendt, S. (2009). Constructions of local culture and impacts on domestic violence in an Australian rural community. *Journal of Rural Studies*, 25(2), 175–184.
- Weston, R., & Gore Jr, P. A. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, 34(5), 719-751.
- White, J. M., & Klein, D. M. (2008). *Family theories*. Thousand Oaks: Sage.
- Wills, T. A., & Cleary, S. D. (1996). How are social support effects mediated? A test with parental support and adolescent substance use. *Journal of Personality and Social Psychology*, 71(5), 937.
- Wolfe, D. A., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C., & Straatman, A. L. (2001). Development and validation of the conflict in adolescent dating relationships inventory. *Psychological Assessment*, 13(2), 277.
- World Health Organization. (2007). *Adolescents, social support and help-seeking behavior: An international literature review and programme consultation with recommendations for action*. Retrieved from [http://apps.who.int/iris/bitstream/10665/43778/1/9789241595711\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/43778/1/9789241595711_eng.pdf)
- World Health Organization. (2013). *Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence*. Retrieved from:

[http://apps.who.int/iris/bitstream/10665/85239/1/9789241564625\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/85239/1/9789241564625_eng.pdf?ua=1)

- Yllo, K. A. (2005). Through a feminist lens. In D. R. Loseke, R. J. Gelles, & M. M. Cavanough, *Current controversies on family violence* (pp. 19-34). Thousand Oaks: Sage.
- Zimmer-Gembeck, M. J., Alexander, T., & Nystrom, R. J. (1997). Adolescents report their need for and use of health care services. *Journal of Adolescent Health, 21*(6), 388–399.
- Zweig, J. M., Dank, M., Yahner, J., & Lachman, P. (2013). The rate of cyber dating abuse among teens and how it relates to other forms of teen dating violence. *Journal of Youth and Adolescence, 42*(7), 1063-1077.

## Appendix A

### Recruitment Letter

Dear \_\_\_\_\_,

My name is Sarah Taylor, and I am a doctoral student at the University of Nebraska-Lincoln. I am conducting my dissertation research project on teen relational health in rural areas. Raised in rural Nebraska myself, I am interested in learning about rural teens' experiences in relationships and perceptions of different relationship behaviors.

Research shows that rates of unhealthy dating behaviors among teens are high in rural areas, which, ultimately, has a negative impact on youth and their development. This research would provide data to better understand how aspects of rural areas are associated with healthy and unhealthy relationships among teens. I anticipate that findings from this study will provide guidance for teen relational health curriculum development and counseling delivery methods. Overall, the goal is to reduce the rates of unhealthy teen dating relationships in rural areas.

The study will consist of a survey, which will take approximately 15 minutes. The survey would be emailed to you, which would then be forwarded to your youths.

I am wondering if you would be willing to allow me access to your youth for this study. Information from your youth would be kept anonymous and confidential. I am happy to provide you any additional information you would like regarding this research. Feel free to email ([sarah.taylor@huskers.unl.edu](mailto:sarah.taylor@huskers.unl.edu)) or call (308-830-2280) me if you have any questions or would like to hear more about this opportunity. I look forward to hearing from you.

Thank you,

Sarah Taylor, M.S., CFLE  
Doctoral Student  
Department of Child, Youth & Family Studies  
University of Nebraska-Lincoln

## Appendix B

### Teen Relational Health Questionnaire

Dear Participant:

You are being given this questionnaire **because you are a teen living in a rural area**, and we are asking young people like you to learn about your experiences.

**This questionnaire is voluntary.** If you do not want to fill out the questionnaire, you do not need to. However, we hope you will take a few minutes to fill it out because your answers are important.

**This questionnaire is private.** No one at your club, school, or home will see your answers. Please answer all of the questions as honestly as you can. If you are uncomfortable answering a question, you may leave it blank.

**This is not a test.** There are no right or wrong answers, and your answers will not affect your participation.

Thank you for your help!

#### Section 1: Relationships Around You

*Please circle the appropriate number for each question.*

	Disagree Strongly	Disagree Somewhat	Agree Slightly	Agree Somewhat	Agree Strongly
Many women have a quality of purity that few men possess	1	2	3	4	5
Women should be cherished and protected by men	1	2	3	4	5
Women seek to gain power by getting control over men	1	2	3	4	5
Every man ought to have a woman whom he adores	1	2	3	4	5
Men are incomplete without women	1	2	3	4	5
Women exaggerate problems they have at work	1	2	3	4	5
Once a woman gets a man to commit to her, she usually tries to put him on a tight leash	1	2	3	4	5
When women lose to men in a fair competition, they typically complain about being discriminated against	1	2	3	4	5

Many women get a kick out of teasing men by seeming sexually available and then refusing male advances	1	2	3	4	5
Women, compared to men, tend to have a superior moral sensibility	1	2	3	4	5
Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives	1	2	3	4	5
Feminists are making unreasonable demands of men	1	2	3	4	5
I have access to my friends when I need them.	1	2	3	4	5
I have access to health services (for example, the doctor) when I need it.	1	2	3	4	5
There are resources in my community that can help people when they are experiencing violence in their relationship.	1	2	3	4	5
I have access to transportation when I need it.	1	2	3	4	5
I am telling the truth on this survey	1	2	3	4	5

*The following questions are about your school. Please circle the appropriate number for each question.*

	Never feel like this	Neither	Feel like this a lot
This school has so many students in it that I feel I don't know lots of kids	1	2	3
Lots of kids don't know me at school because it is so large	1	2	3
At this school the teachers don't seem to know who you are or what your name is.	1	2	3
At this school most students don't seem to know who you are or what your name is.	1	2	3

*The following questions are about your parents/caretakers. Please circle the appropriate number for each question.*

My parents/caretakers.....

	Untrue	Somewhat untrue	Somewhat True	True
Are always nosing into my business	1	2	3	4

Have to know everything about me	1	2	3	4
Are always interfering	1	2	3	4
Pry into my private matters	1	2	3	4
Often check up on me to see what I'm doing	1	2	3	4
Insist on knowing where I'm going	1	2	3	4
Don't pry into my life	1	2	3	4

*The following questions are about relationships. Please circle the number that represents your response for each question.*

	Strongly Disagree	Disagree	Agree	Strongly Agree
Slamming a locker door or driving recklessly in a car to scare someone is abusive.	1	2	3	4
If the person you are going out with acts jealous, it shows true love.	1	2	3	4
It is abusive to yell at someone even if you don't hit them.	1	2	3	4
True love is when you are willing to give up everything for the other person.	1	2	3	4
Love is when two people are so crazy about each other that they can't stand to be apart.	1	2	3	4
It is possible to be angry or even argue with your dating partner without being abusive.	1	2	3	4
Dating violence only includes physical abuse.	1	2	3	4
It's O.K. for a boy to force a girl to have sex with him if she has flirted with him or led him on.	1	2	3	4
Some people enjoy being hit in a relationship, that's why they put up with it.	1	2	3	4
A person is not responsible for what they do when they are drunk or high.	1	2	3	4
Most physical violence in dating occurs because a partner asked for it.	1	2	3	4
If you did something wrong, it is your fault if you get hit.	1	2	3	4
I am not paying attention to how I answer this survey	1	2	3	4

## Section 2: Your Current or Past Dating Relationships

**At your age, a number of teens are thinking about dating. Some begin thinking of people they might like to date, others go out on dates, and some begin steady relationships. Please check the statement(s) that best applies to you.**



- I have not yet begun dating/going out  
 I have begun dating/going out.  
 I am currently in a relationship

**If you have begun dating:**

How many serious relationships have you had? \_\_\_\_\_

Did/do your friends know about this dating partner(s)?  Yes  No

Did/do your parents/caregivers know about this dating partner(s)?  Yes  No

**The remaining pages will ask you to answer questions thinking about your current or recent ex-boyfriend/girlfriend. Please check which person you will be thinking of when you answer these questions:**

- I am thinking about somebody who is my boyfriend/girlfriend right now **(Fill out Part A)**  
 I am thinking of a recent ex- within the last 3 months **(Fill out Part B)**  
 I am thinking of an ex- within the past year **(Fill out Part B)**

**Part A – (If this is your current boyfriend/girlfriend)**

- a. How long have you been dating/going out? \_\_\_\_\_  
b. How old is your dating partner? \_\_\_\_\_  
c. My dating partner is a:  Boy  Girl  
d. Is this the only person you are seeing?  Yes  No  
e. Are you the only person he/she is seeing  Yes  No  Not sure  
f. How often do you see each other?  
 Everyday  
 At least 3 times a week  
 1-2 times a week  
 Less than once a week (every 2 weeks, once a month)  
 Less than once a month

**Part B – (If this is your ex)**

- a. How long did you go out together? \_\_\_\_\_  
b. How old is your ex-dating partner? \_\_\_\_\_  
c. My ex-dating partner was a:  Boy  Girl  
d. Why did you stop going out with him/her?

**The following questions ask you about things that may have happened to you with your dating partner while you were having an argument. When answering these questions, check the box that is your best estimate of how often these things have happened with the person you are thinking of (current or ex-dating partner) in the last 12 months. As a guide use the following scale:**

**During a conflict or argument with my dating partner in the last 12 months:**

**Never:** this has **never** happened in your relationship.

**Seldom:** this has only happened about **1–2 times** in your relationship.

**Sometimes:** this has happened **3–5 times** in your relationship.

**Often:** this has happened **6 times or more** in your relationship.

	Never	Seldom	Sometimes	Often
I spoke to my partner in a hostile or mean tone of voice.	1	2	3	4
My partner spoke to me in a hostile or mean tone of voice.	1	2	3	4
I insulted my partner with put-downs.	1	2	3	4
My partner insulted me with put-downs.	1	2	3	4
I said things to my partner's friends about my partner to try and turn them against him/her.	1	2	3	4
My partner said things to my friends about me to turn them against me.	1	2	3	4
I kicked, hit, or punched my partner.	1	2	3	4
My partner kicked, hit, or punched me.	1	2	3	4
I slapped or pulled my partner's hair.	1	2	3	4
My partner slapped or pulled my hair.	1	2	3	4
I threatened to hurt my partner.	1	2	3	4
My partner threatened to hurt me.	1	2	3	4
I threatened to hit or throw something at my partner.	1	2	3	4
My partner threatened to hit or throw something at me.	1	2	3	4
I spread rumors about my partner.	1	2	3	4
My partner spread rumors about me.	1	2	3	4
I touched my partner sexually when they didn't want me to.	1	2	3	4
My partner touched me sexually when I didn't want them to.	1	2	3	4
I forced my partner to have sex when they didn't want to.	1	2	3	4
My partner forced me to have sex when I didn't want to.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
28. The answers I have given on this survey are true	1	2	3	4

*Please answer how many times in the previous year each behavior has occurred. Please circle the appropriate number for each question.*

	<b>0 times</b>	<b>1 time</b>	<b>2 times</b>	<b>3 times</b>	<b>4 times</b>	<b>5 times</b>
I monitored who my dating partner(s) talk to and who he/she is friends with using the Internet or a cell phone	0	1	2	3	4	5
My dating partner(s) monitored who I talk to and who I am friends with using the Internet or a cell phone	0	1	2	3	4	5
I looked at my dating partner's private information on a computer or cell phone without his/her permission (like his/her personal email, instant messages, text history, calls log, etc.)	0	1	2	3	4	5
My dating partner(s) looked at my private information on a computer or cell phone without my permission (like his/her personal email, instant messages, text history, calls log, etc.)	0	1	2	3	4	5
I monitored my dating partner's whereabouts using the Internet or a cell phone (checking his/her Facebook "status," calling or texting repeatedly to ask where he/ she was, etc.).	0	1	2	3	4	5
My dating partner(s) monitored my whereabouts using the Internet or a cell phone (checking his/her Facebook "status," calling or texting repeatedly to ask where he/ she was, etc.).	0	1	2	3	4	5

*Please circle the appropriate number for each question.*

	<b>Little or none</b>	<b>Somewha t</b>	<b>Very much</b>	<b>Extremel y Much</b>	<b>The Most</b>
How much free time do you spend with this person?	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
How much do you play around and have fun with this person?	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
How much do you go places and do enjoyable things with this person?	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

How much do you talk about everything with this person?	1	2	3	4	5
How much do you share your secrets and private feelings with this person?	1	2	3	4	5
How much do you talk to this person about things that you don't want others to know	1	2	3	4	5

### Section 3: Tell us about you

#### What is your gender?

- Girl  
 Boy  
 Other \_\_\_\_\_

#### What is your grade level?

- 8<sup>th</sup>  
 9<sup>th</sup>  
 10<sup>th</sup>  
 11<sup>th</sup>  
 12<sup>th</sup>  
 other \_\_\_\_\_

#### What is the population of your community (or nearest community)?

- Less than 100  
 100 - 499  
 500 - 999  
 1,000 – 4,999  
 5,000 – 9,999  
 10,000 – 19,999  
 20,000 – 29,999  
 30,000 – 39,999  
 40,000-49,999  
 50,000 and over

#### Where do you live? *Circle the number of your answer.*

- Within city limits  
 Outside city limits, on a farm/ranch  
 Outside city limits, not on a farm/ranch

#### Are you Hispanic/Latino? *Circle the number of your answer.*

- Yes  
 No

#### Which racial groups do you identify yourself with? *Circle all that apply.*

- White  
 Black/African American  
 American Indian/Alaska Native

- Asian or Pacific Islander
- Other \_\_\_\_\_

**Which of the following best describes your sexuality?**

- Heterosexual (straight)
- Gay or lesbian
- Bisexual
- Don't know/not sure
- Other \_\_\_\_\_

**Which of the following best describes your family's housing?**

- Own house
- Rent house
- Rent apartment
- Other \_\_\_\_\_

**Do you receive free or reduced lunchtime meals at school?**

- Yes
- No

**Please check all of the adults living within your home:**

- Father
- Mother
- Step-father
- Step-mother
- Grandmother
- Grandfather
- Other \_\_\_\_\_

**Please answer the following questions as best as you can. There are no right or wrong answers.**

Who or what has influenced your attitude on how people should act in relationships?

Please explain your sources of social support that you talk to about your boyfriend/girlfriend.

Please explain the extent to which adults (parents, teachers) are aware of your dating behaviors (past or present).

**Thank you!**

## Appendix C

### Informed Consent Form



COLLEGE OF EDUCATION AND HUMAN SCIENCES  
Department of Child, Youth and Family Studies

#### INFORMATION ABOUT YOUR RIGHTS AS A RESEARCH PARTICIPANT

We are inviting you to be part of our study because we believe that you are knowledgeable about teen relational health in rural communities. We are trying to better understand healthy and unhealthy relationships among teenagers in rural communities. We would like to know about your experiences in relationships and attitudes towards relationships and what rural factors are associated with your experiences and attitudes.

This survey will take about 15 minutes. I will ask you for your experiences in different relationships, your attitudes towards different relationship behaviors, and your perceptions of other behaviors that are relevant to youth your age.

Your responses will be kept confidential and I will not ask you to give your name or anything that might identify you on the survey. Information that we gather from this study can be reported in scientific meetings, published in scientific journals or other similar venues. We will only present general patterns that we find in the data. We will not include any names or identifying information.

This survey should not pose any known harm to you, but if you feel uncomfortable you can stop at any time. Joining this study is voluntary. You can refuse to participate or withdraw at any time without affecting your relationship with the investigators or the University of Nebraska - Lincoln. By participating, you are certifying that you have decided to participate in the study after having heard and understood the information presented here. If you have any other questions that have not been answered by the investigator or to report any concerns about the study, you may contact the University of Nebraska -Lincoln Institutional Review Board, telephone (402) 472-6965. You will be given a copy of this form to keep.

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## Appendix D

### Example Codebook

Code	Description of Code	Example Excerpt
Parents	This code looks at how parents influence their child's attitude on how people should act in relationships.	"My dad has always taught me to respect women no matter what they do."
Media	This code looks at how different types of media (e.g., television, movies) impact adolescents' attitudes on how people should act in relationships.	"Social media, television, things I've read about in books or articles."
Grandparents	This code looks at how grandparents influence their grandchild's attitude on how people should act in relationships.	"Seeing how strong my grandparents' relationship is"

### Appendix E Correlations Table

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.		
1. Vphy																							
2. Vthr	.51 **																						
3. Vrel	.27 **	.32**																					
4. Vsex	.07	.25**	.16																				
5. Vver	.31 **	.30**	.24 **	.3 3*																			
6. Vcyb	.25 **	.45**	.19 *	.3 6*	.42**																		
7. Pphy	.46 **	.24	-.05	.2 2*	.11	.22*																	
8. Pthr	.41 **	.40**	-.03	.2 1*	.15	.18*	.70**																
9. Prel	.06	-.05	.57 **	- 0 8	.10	.13	.01	- .04															
10. Psex	.01	-.02	-.04	.4 7*	.15	.20*	.22*	- .02	- .03														
11. Pver	.17 *	.03	-.02	.1 4	.74**	.24**	.34**	.39 **	.14	.09													
12. Pcyb	.19 *	.15	.11	.1 8*	.36**	.76**	.08	.03	.30 **	.09	.30 **												
13. attNP	- .24 **	-.16	-.06	- 1	-.07	-.15	-.15	- .14	.07	-	-	-.02											
14. attPS	- .17	-.19*	.00	- 0 8	-.08	-.08	-.13	- .18 *	.06	-	-	-.01	.38* *										
15. Hostile	.32 **	.23**	.19 *	.0 7	.13	.32**	.16	.19 *	.03	.08	.04	.18*	- .45* *	- .44* *									
16. Benev	.13	.12	.06	.1 2	.09	.14	.22*	.15	.05	.10	.09	.07	- .45* *	- .24* *		.44**							
17. Friends	- .11	-.05	-.00	- 0 3	-.11	-.11	-.02	- .03	.05	.08	-	-.06	-.08	.01	-.02	.15 *							



18. Health	- .09	.08	.08	- .08	-.08	.03	.00	.07	.11	.05	- .07	-.08	.08	.13	.01	.11	.41**				
19.resou rce	- .07	.02	-.08	.08	-.21*	-.03	.01	.07	.04	- .11	- .17	-.09	.04	-.09	-.04	.15	.20**	.16*			
20. Transp.	.01	.06	.09	.00	-.05	.04	.04	.02	.11	.07	- .06	.02	.06	.11	.16*	.09	.25**	.48**	.22**		
21. Parent	- .07	.02	.16	.14	.22	.02	.02	.08	.01	.05	.17	.01	-.04	-.08	.17*	.14	-.10	-.08	-.03	-.12	
22. School	.06	.07	-.11	.02	-.05	-.13	.08	.06	- .14	- .07	- .05	-.16	- .19*	- .34*	.07	.08	-.08	-.16*	.17*	-.16*	.03

Note: \*\* Correlation is significant at the .01 level; \* Correlation is significant at the .05 level.

## Appendix F

### Summary of Measurement Model Fit Indices

	Chi Square	RMSEA	CFI	SRMR
Full model	710.12; 0.00	0.12	0.48	0.11
Model 1a	43.71; 0.06	0.05	0.95	0.05
Model 1b	37.65; 0.26	0.03	0.98	0.06
Model 1c	146.17; 0.00	0.05	0.96	0.06
Model 1d	6.83; 0.23	0.05	0.99	0.04
Model 1e	8.87; 0.18	0.05	0.97	0.05
Model 1f	82.96; 0.00	0.08	0.96	0.05

## Appendix G

### Summary of Factor Loadings and Latent Variable Correlations

Indicator	Stand. Factor loading	p-value
<b>Full Model</b>		
Gender Roles → Hostile	0.77	0.00
→ Benevolent	0.58	0.00
Attitudes → Att towards nonphysical	0.62	0.00
→ Att towards phy/sexual	0.61	0.00
Isolation → Friends	0.48	0.00
→ Health Services	0.77	0.00
→ ADV Resources	0.25	0.00
→ Transportation	0.63	0.00
Anonymity → School Anonymity	0.30	0.52
→ Parent Anonymity	0.08	0.56
Victimization → Physical	0.64	0.00
→ Threatening	0.71	0.00
→ Relational	0.36	0.00
→ Sexual	0.38	0.00
→ Emotional/Verbal	0.52	0.00
→ Cyber	0.59	0.00
Perpetration → Physical	0.82	0.00
→ Threatening	0.84	0.00
→ Relational	0.03	0.80
→ Sexual	0.13	0.19
→ Emotional/Verbal	0.46	0.00

→ Cyber	0.15	0.13
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**Hyp1a Model**

Gender Roles → Hostile	0.77	0.00
→ Benevolent	0.58	0.00

Attitudes → Att towards nonphysical	0.68	0.00
→ Att towards phy/sexual	0.56	0.00

Victimization → Physical	0.43	0.00
→ Threatening	0.61	0.00
→ Relational	0.38	0.00
→ Sexual	0.46	0.00
→ Emotional/Verbal	0.57	0.00
→ Cyber	0.71	0.00

**Hyp1b Model**

Isolation → Friends	0.50	0.00
→ Health Services	0.79	0.00
→ ADV Resources	0.26	0.00
→ Transportation	0.60	0.00

Victimization → Physical	0.40	0.00
→ Threatening	0.59	0.00
→ Relational	0.37	0.00
→ Sexual	0.48	0.00
→ Emotional/Verbal	0.59	0.00
→ Cyber	0.70	0.00

**Hyp1c Model**

School → Item 1	0.89	0.00
Anonymity → Item 2	0.91	0.00

	→ Item 3	0.70	0.00
	→ Item 4	0.89	0.00
Parent	→ Item 1	0.79	0.00
Anonymity	→ Item 2	0.70	0.00
	→ Item 3	0.78	0.00
	→ Item 4	0.82	0.00
	→ Item 6	0.47	0.00
	→ Item 7	0.62	0.00
Victimization	→ Physical	0.38	0.00
	→ Threatening	0.58	0.00
	→ Relational	0.38	0.00
	→ Sexual	0.48	0.00
	→ Emotional/Verbal	0.61	0.00
	→ Cyber	0.70	0.00
<b>Hyp1d Model</b>			
Gender Roles	→ Hostile	0.74	0.00
	→ Benevolent	0.60	0.00
Attitudes	→ Att towards nonphysical	0.69	0.00
	→ Att towards phy/sexual	0.55	0.00
<b>Hyp1e Model</b>			
Isolation	→ Friends	0.50	0.00
	→ Health Services	0.80	0.00
	→ ADV Resources	0.26	0.00
	→ Transportation	0.60	0.00

**Hyp1f Model**

School	→ Item 1	0.89	0.00
Anonymity	→ Item 2	0.91	0.00
	→ Item 3	0.70	0.00
	→ Item 4	0.89	0.00
Parent	→ Item 1	0.80	0.00
Anonymity	→ Item 2	0.78	0.00
	→ Item 3	0.77	0.00
	→ Item 4	0.75	0.00
	→ Item 6	0.48	0.00
	→ Item 7	0.62	0.00

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## Correlations between Latent Variables

Stan. Est.      p-value

**Hyp1a Model**

Gender roles with Attitudes towards ADV	-0.93	0.00
Gender roles with Victimization	0.43	0.00
Attitudes towards ADV with Victimization	-0.29	0.02

**Hyp1b Model**

Isolation with Victimization	-0.04	0.78
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**Hyp1c Model**

School Anonymity with Parent Anonymity	-0.14	0.10
School Anonymity with Victimization	0.08	0.43
Parent Anonymity with Victimization	0.15	0.18

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**Hyp1d Model**

Gender roles with Attitudes towards ADV	-0.95	0.00
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**Hyp1e Model**

N/A

**Hyp1f Model**

School Anonymity with Parent Anonymity	-0.14	0.10
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### Appendix H.

#### Summary of Structural Model Fit

	Chi Square	RMSEA	CFI	SRMR
Model 1a	43.72, $p > .05$	0.05	0.95	0.05
Model 1a-alternative	43.75, $p < .05$	0.06	0.93	0.05
Model 1b	49.49, $p < .05$	0.05	0.93	0.06
Model 1c	166.67, $p < .05$	0.05	0.95	0.07
Model 1d	6.12, $p > .05$	0.08	0.97	0.03
Model 1e	7.52, $p > 0.18$	0.05	0.97	0.04
Model 1f	80.20, $p < 0.00$	0.08	0.96	0.05



## Appendix I

### Summary of Structural Model Path Coefficients and R<sup>2</sup>

		Stand. Path Coefficient	R <sup>2</sup>
<b><u>Hyp1a Model</u></b>			
Gender roles	→ Attitude towards ADV	-0.94***	ATT = 0.84***
Gender roles	→ Victimization	1.25 <sup>1</sup>	VICT = 0.28
Attitude towards ADV	→ Victimization	0.87	
<b><u>Hyp1a Model - alternative</u></b>			
Hostile	→ Attitude towards non-physical	-0.31***	VICT = 0.14*
	→ Attitude towards physical/sexual	-0.41***	
	→ Victimization	0.37**	
Benevolent	→ Attitude towards non-physical	-0.30***	
	→ Attitude towards physical/sexual	-0.05	
	→ Victimization	-0.01	
Attitudes toward non-physical	→ Victimization	-0.07	
Attitude toward physical/sexual	→ Victimization	0.06	
<b><u>Hyp1b Model</u></b>			
Isolation	→ Victimization	-0.33	VICT = 0.00
<b><u>Hyp1c Model</u></b>			
School Anonymity	→ Victimization	0.07	VICT = 0.03
Parent Anonymity	→ Victimization	0.07	

**Hyp1d Model**

Gender roles	→ Attitude towards ADV	-0.08***	Pverb = 0.01
Gender roles	→ Emotional/Verbal Perpetration	0.08	ATT = 0.90***
Attitude towards ADV	→ Emotional/Verbal Perpetration	-0.00	

**Hyp1e Model**

Isolation	→ Emotional/Verbal Perpetration	-0.12	Pverb = 0.01
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**Hyp1f Model**

School Anonymity	→ Emotional/Verbal Perpetration	0.07	Pverb = 0.02
Parent Anonymity	→ Emotional/Verbal Perpetration	0.14	

Note: \*= $<.05$ , \*\*= $<.05$ , \*\*\*= $<.001$ .<sup>1</sup> Joreskog (1999) explain that standardized path coefficients can be over 1.00 when multicollinearity is present. In this model, gender roles, attitude towards ADV, and victimization are all correlated.