

GENDER DIFFERENCES IN FAMILY RELATIONSHIPS AND SCHOOL DELINQUENCY

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Brittany Ann Waldman

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The following faculty members have examined the final copy of this thesis for form and content, and recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts with a major in Sociology.

Jennifer Pearson, Committee Chair

Lisa Thrane, Committee Member

Fred Besthorn, Committee Member

DEDICATION

I dedicate my thesis work to my family and many friends who have shown me unconditional love and support. A special feeling of gratitude to my loving parents, Bob Waldman, and John & Tammy Trabert, whose words of encouragement and push for tenacity ring in my ears. My family, Jerod, Shelby, Josh, Kaileigh, Jacob, Hayes, Harper, and loving grandparents, who have been a constant reminder of motivation and supported me through this journey. I dedicate much of this work to Dylan and my wonderful friends, who never let me lose confidence in my abilities and passions.

I dedicate this work to the youth in a very special juvenile justice program I was privileged enough to work with. These youths persevered through many obstacles in their young adult lives, and never gave up. Their unforgettable personalities, infectious attitudes, and big dreams, encouraged me to chase my own. Because of these youth, I am a better person.

“I think it’s important for us as a society to remember that the youth within juvenile justice systems, are most of the time, youths who simply haven’t had the right mentors and supporters around them-because of circumstances beyond their control”
-Q’orianka Kilcher

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ABSTRACT

Adolescents spend most of their waking time in school or on school grounds, and as a result, many adolescents first encounter delinquency there. Research has found that youth who have strong family relationships develop positive relations with others, engage in pro-social activities, and avoid delinquent behavior. The purpose of this study is to explain the connection between family relationships and school delinquency and examine how these links vary by gender. In this research, social capital theory will be used to understand the connection between school delinquency and family relationships. The present study examined the associations between multiple aspects of family relationships (i.e. parental supervision, family rules, parental communication, parental school contact, parental interaction) and school delinquency. Analysis was conducted on the public-use data from the 2002 Educational Longitudinal Study (ELS: 2002), a nationally representative, longitudinal study of 10th graders (N=8,169). There were four research questions that were examined in this study: 1) What aspects of family relationships are associated with delinquency?; 2)? Are there gender differences in delinquency?; 3)? Are there gender differences in family relationships?; and 4)? Are there gender differences in the association between family relationships and delinquency? Results show that the family relationship variables were significantly associated with school delinquency, but these associations were not as strong as expected. Through gender interaction terms, only one of the family relationship variables had a different effect for males and females: parental school contact is positively related for both males and females, but this association is stronger for males. This study will contribute to the existing literature by highlighting more specifically what types of family dimensions' effect school delinquency more. Ideally, this will create the opportunity for schools to focus their attention on student's family life and risk and protective factors, when delinquency is becoming an issue in their academic success.

TABLE OF CONTENTS

Chapter		Page
1.	INTRODUCTION	1
2.	LITERATURE REVIEW	4
	2.1 Family Relationships & the Shaping of Delinquency	4
	2.2 Linking Social Capital to Delinquency	9
	2.3 Gender, Family Relationships, & Delinquency	10
	2.4 Controls	12
	2.5 Current Study	16
3.	THEORETICAL MODEL AND HYPOTHESES	17
	3.1 Research Questions	17
	3.2 Theoretical Model	18
	3.3 Discussion of Model Segments	19
	3.3.1 Model Segment One	19
	3.3.2 Model Segment Two	19
	3.3.3 Model Segment Three	20
	3.3.4 Model Segment Four	21
4.	METHODS	23
	4.1 Data	23
	4.2 Sample	23
	4.3 Variables	24
	4.3.1 Dependent Variable	24
	4.3.2 Key Independent Variable	25
	4.3.3 Controls	28
	4.4 Plan of Analysis	32
5.	RESULTS	33
	5.1 Descriptive Statistics	33
	5.1.1 School Delinquency	33
	5.1.2 Family Relationships	33

TABLE OF CONTENTS (continued)

Chapter		Page
	5.1.3 Student Characteristics	34
5.2	Bivariate Results	37
	5.2.1 Family Relationships & Delinquency	37
	5.2.2 Gender & Delinquency	39
	5.2.3 Gender & Family Relationships	39
	5.2.4 Controls	40
5.3	Multivariate Results	42
	5.3.1 Model 1	42
	5.3.2 Model 2	45
6.	DISCUSSION	47
	6.1 Family Relationships & School Delinquency	47
	6.2 Gender Differences in Delinquency	49
	6.3 Gender Differences in Family Relationships	50
	6.4 Gender, Family Relationships, & Delinquency	52
	6.5 Limitations & Future Research	53
7.	CONCLUSION	56
	REFERENCES	59
	APPENDIX	66

LIST OF TABLES

Table	Page
1. Univariate Analysis Descriptive Statistics	67
2. Univariate Analysis Frequencies	68
3. Zero-Order Correlation among Study Variables	69
4. Descriptive Statistics by Gender	70
5. F-Tests for Difference School Delinquency by Family Composition	71
6. F-Tests for Difference in School Delinquency by Number of Peer Drop Outs	71
7. F-Tests for Difference in School Delinquency by Race/Ethnicity	72
8. T-Tests for Differences by Level of Crime in Neighborhood	72
9. Ordinary Least Squares Regression Results for School Deviance	73

LIST OF FIGURES

Figure	Page
1. Theoretical Model	18

CHAPTER 1

INTRODUCTION

Adolescents spend most of their waking time in school or on school grounds. Because of this, many adolescents first encounter delinquency there (Jenkins, 1995). Delinquency can be observed in educational institutions as, involvement in physical fights, school misconduct, cutting and skipping class, tardiness, and poor school attendance (Jenkins, 1995; Gottfredson, Gottfredson, Payne, & Gottfredson, 2005; Crosnoe, Erickson, & Dornbusch, 2004). Next to parental and family influence, educational institutions have principal responsibility of educating young adolescent's proper social behavior (Jenkins, 1995). Challenged with the issue of school delinquency, public schools often have complications in disciplining their student's delinquent behavior and providing supportive services to their students who engage in delinquent behavior (Elam, Rose, & Gallup, 1993). When students engage in school delinquency, their academic success and well-being is jeopardized.

Previous research demonstrates the important role of family relationships in delinquent behavior among adolescents. Often among students who are engaged in delinquent behavior, their home is filled with poor family relationships and negative influences that can affect their behavior in school (Jenkins, 1995; Gottfredson, Gottfredson, Payne, & Gottfredson, 2005). Rhodes and Jason (1990) found that students who have strong family support engage in positive social behavior and have the capital, abilities, and confidence to resist delinquent behavior. Delinquent behavior is more likely when there are weak and poor parent-child relationships (Vanassache, et al., 2014; Amato & Gilbreth 1999; Crawford & Novak 2008; Kierkus & Baer 2002; Kurdek 1994; Pett et al., 1999). The purpose of this study is to shine light on the connection between family relationships and school delinquency.

Social capital theory can help explain why negative family influences matter for school delinquency. Social capital can be defined as the networks of relationships individuals have that enable effective and successful functioning (Coleman, 1990). The relationships built between parents, teachers, and others can be interpreted as social capital and are used to communicate norms and discourage inappropriate behavior that might result in delinquency (Dufer et al. 2015). The stronger these connections or relationships are, the greater are the resources to which children have access (Dufer et al., 2015). Student's social capital can promote positive social behavior to avoid deviant behavior in school (Wright, Cullen, & Miller, 2001). If students do not have social capital at home, poor family relationships can be supplemented with other forms of social capital such as supportive, such as mentorship programs, family counseling, or even youth group involvement. Because family relationships can be understood as a form of social capital, it is crucial to provide wrap around, supportive services, or an individualized plan of care or support to those students who have poor family relationships (Moffitt, 2008; Farrington, 2004). These services can focus on students' academic success, family relationships, mental and physical health, mentorship, and provide a service of empowerment.

While family relationships are the primary focus of this study, I also consider the role of gender. Gender has been found to be strongly and consistently associated with delinquent acts in adolescents (McAra & McVie, 2016). Male adolescents have been found to engage in deviant behaviors that are more violent, more often than females (McAra & McVie, 2016; Esbensen, Peterson, & Taylor, 2011; Moffitt, Caspi, Rutter, & Silva, 2001). Steffensmeier and Schwartz (2009) found that gender is the strongest risk factor for delinquent behavior, with males engaging in more frequent occurrences of delinquent acts than females. Given this, understanding the link between family relationships and delinquency should take gender into account.

In the current study, data from the 2002 Educational Longitudinal Study (ELS), a nationally representative, longitudinal study of 10th graders are utilized to examine the connection between multiple dimensions of family relationships and school delinquency and if these relationships vary by gender. To address these relationships, this study presents findings based on four questions: 1) How do family relationships shape delinquency?; 2) Are there gender differences in delinquency?; 3) Are, are there gender difference in family relationships?;, and 4) Are there gender differences in the association between family relationships and delinquency? This study will contribute to the existing literature by highlighting more specifically what types of family dimensions' effect school delinquency more. Ideally, this will create the opportunity for schools to focus their attention on student's family life and risk and protective factors, when delinquency is becoming an issue in their academic success.

CHAPTER 2

LITERATURE REVIEW

2.1 Family Relationships & the Shaping of Delinquency

Although there are numerous factors that play a role in delinquent behavior among adolescent youth, research has continued to demonstrate that family structure, family conflict, parental involvement, parent-child relationships, and other family dynamics significantly influence delinquency (e.g., Jang 1999; Jang & Smith 1997; Laub & Sampson 1988; Simons et al. 1994; Simons, Simons, & Wallace 2004; Wadsworth 2000; Wells & Rankin 1991). In terms of family structure, children living single parent households compared to those in families with two married parents are often more involved in delinquency. Wells and Rankin (1991) conducted a meta-analysis and found a consistent association between living in a single-parent family and delinquency across a diverse set of studies. Sokol-Katz & Dunham (1997) found that the impact of living with a single parent was consistent among males and females and both black and white youth. Their study also found that family structure has a direct effect on family dynamics, which has a significant effect on delinquency among adolescents (1997).

Though earlier research established a link between family structure and delinquency, there has been a swift change from traditional family structures to non-traditional family structures credited to life experiences such as divorce, child-bearing out of wedlock, non-marital cohabitation, adoption, and diverse step-families (Demuth & Brown, 2004; McLanahan & Sandefur 1994). Children today are more likely to experience numerous living arrangements and come from single parent households (Kersha-Aerga & White-Lewis, 2013). Indeed, research suggests that family structure is only part of the predictive pathway of juvenile offending, and

family relationships also contribute to this pathway (Rhodes & Jason, 1990). In fact, some researchers (e.g., Cernkovich & Giordano 1987; Laub & Sampson 1988; Van Voorhis et al. 1988, Demuth & Brown, 2004) have found differences in school delinquency are better explained by indicators of parent-child attachment and home quality in family structure.

Previous research has examined how multiple aspects of family relationships, including parental monitoring, parental supervision, parental attachment, and closeness of a family, are related to delinquency. Parental attachment is a dimension that has been recognized as an important predictive factor in predicting delinquent behavior (Rankin & Kern 1994; Sokol-Katz, Dunham, & Zimmerman 1997). Many scholars have found that weak parent-child attachment leads to more delinquent behavior in children because their agreement to their parents' views decreases (Rankin & Kern 1994; Sokol-Katz, Dunham, & Zimmerman, 1997). Sokol-Katz & Dunham (1997), found that family attachment has a direct effect on delinquent behavior among adolescents. Similarly, Demuth and Brown (2004) found that adolescents who report having strong family attachment to both of their parents have lower school delinquency rates, confirming that family attachment is a protective factor for juvenile school delinquency (Hirschi, 1969; Rankin & Wells, 1990; Rankin & Kern, 1994; Wright, Cullen, & Miller, 2001).

Parent-child communication is an important family relationship that can discourage delinquent behavior. Farrington (1999) discovered that boys who had fathers that did not engage in proactive leisure time and communication with their sons often acted out with violent behavior and were more likely to be involved in the juvenile justice system. Davidson and Cardemil (2009) determined that communication among parent and child can affect a child's psychological development of knowing right from wrong. Many studies have found that strong communication between child and parent, such as expressing emotional needs and problems, can promote

healthy family relations, prevent delinquent behaviors, and support appropriate learned behavior to help social development (Davison & Cardemil, 2009; Huff, Widner, & McCoy, 2003; Clark & Shields, 1997; Caprara et al., 1998). Further research suggests that adolescents who have open communication with their parents experience happiness and satisfaction, but adolescents who have strained communication with their parents tend to experience depression, delinquency, substance abuse, and academic failure (Davalos, Chavez, & Guardiola, 2005). Williams (1994) found that parental communication and parental involvement at a young age predicted less involvement in the juvenile justice system, though this relationship was found to be weaker for females than for males.

Another strong protective factor against adolescent school delinquency is parental involvement. Involvement between parent and child can enhance the quality of their relationship and offer additional opportunities for communication. Parental interaction, or how much time a parent spends with their child outside of school, is a crucial protective factor to consider while examining juvenile school delinquency and family relationships. A study by Simons et al. (1994) found that the quality of parental interaction had a direct effect on adolescent aggressiveness, delinquency, and psychological disorders: the better the quality of interaction, the less delinquent behavior, the poorer quality of interaction, the more delinquent behavior (Simons et al, 1994). Rhodes and Jason (1990), found that of the most influential factors in school delinquency is family interaction. They also argue that parents who invest more time in their children tend to have fewer children involved with delinquent acts, or drug use (Jason & Rhodes, 1990). These findings suggest that adolescents who have more interaction with their parents will be less likely than others to engage in delinquent behavior, perhaps lowering their chances of becoming adult offenders.

Another form of parental involvement is how engaged and connected parents are with their adolescent child's school. Research demonstrates adolescents whose parents contact their school more or engage in their child's educational career have fewer school problems (Davalos, Chavez, & Guardialo, 2005). In addition, social capital between parents and schools reduces school delinquency in schools (Gadeen, 2002), as youth whose parents are involved in their school achieve academic success and are less likely to engage in risky behavior. Adolescents who have parents who are more involved with their school will be more likely to associate with other parents who have similar involvement, expectations, and educational aspirations (Davalos, Chavez, & Guardialo, 2005). Jenkins (1995) found that adolescents who reported that their parents were highly involved in their education career, were also more educationally committed to their studies, resulting in lower levels of school delinquency and higher academic success.

Family order, or how a family functions as a unit can also discourage youth from getting involved in delinquent behaviors. Parental supervision and whether a family has rules are two examples of family order. Church II, Wharton, and Taylor (2009) found that poor family supervision and the capability of the family members to cope with life stress directly effects adolescent delinquent behavior. These researchers also found that adolescents with parents who have poor parenting skills, are more likely to learn delinquent behaviors from other family members (Church II, Wharton, and Taylor, 2009). Parental supervision is an important protective factor in student delinquency. Scholars have found that, when adults fail to monitor where adolescents are, what they are doing, and with whom they are associating, this may lead to higher rates of delinquent behavior (Demuth & Brown 2004; Jang & Smith 1997; Wadsworth 2000; Warr 2005; Patterson & Dishion 1985). Parents who are actively monitoring their adolescent children's behavior, set clear expectations that delinquent acts are not acceptable,

reward positive behavior and discipline negative behavior, will reduce the possibility of juvenile justice involvement (Gottfredson & Hirschi, 1990; Capaldi & Patterson, 1996; Hawkins, Arthur, & Catalano, 1995). In addition, to promote healthy family order, many families have rules their adolescent children are to follow to teach discipline and order. These family rules teach adolescents about rewards for doing good behavior, and discipline for poor behavior.

Researchers found that how parents discipline their adolescent children predicts delinquent behavior at home and at school (Snyder et al., 1994; Snyder & Patterson, 1995). For example, Wells and Rankin (1988), found that adolescent boys who had parents inconsistently punish them, sometimes disciplining them but sometimes ignoring their behaviors, were much more likely to commit a delinquent act against someone else than adolescent boys whose parents disciplined them more consistently (Hawkins, Herrenkohl, Farrington, Brewer, Catalano, Harachi, & Cothorn, 2000).

Adolescents often become involved in delinquent behaviors as they age and emphasize their autonomy, or freedom (Dishion, Nelson, & Bullock, 2004; McGue, Elkins, Wladen, & Iacono, 2005, Fagan Van Horn, Antaramian, & Hawkins, 2011). Through this growing period, there can be increased conflict, and decreased discipline for delinquent acts (Fagan Van Horn, Antaramian, & Hawkins, 2011). However, when parents display affection to their children, keep their children involved in family bonding activities, and recognize good behavior, parents create a strong, supportive relationship with their child (Catalano & Hawkins, 1996). This process has often been explained through social control theory, which suggests that adolescent's relationships, values, belief, and norms encourage them to follow their parent's rules and not engage in activity that will break the law (Fagan Van Horn, Antaramian, & Hawkins, 2011; Hirschi, 1969). Creating a strong, supportive relationship will then encourage youth from

engaging in delinquent behaviors because that engagement would jeopardize their approval from their parents (Fagan Van Horn, Antaramian, & Hawkins, 2011, Hirschi, 1969). However, given my focus on relationships, a social capital explanation seemed to offer unique insights for understanding the link between family relationships and delinquency.

2.2 Linking Social Capital to Delinquency

Social capital, as conceptualized by Coleman in 1990, refers to how the quality, involvement, and structure of relationships affect the diffusion of capital through generations of family to help shape and predict certain trajectories among adolescents (Wright, Cullen, & Miller, 2001). Social capital theory can help explain why family relationships matter for school delinquency. Gadeen (2002) stated that, social capital between parents and schools has been shown to reduce school delinquency in schools. Coleman (1990) defines social capital as the networks of relationships individuals have that enable effective and successful functioning in society. The relationships that are built between parents, teachers, and others can be interpreted as social capital and used to communicate norms and discourage inappropriate behavior that might result in delinquency (Dufer et al., 2015). Putnam (1995) similarly defines social capital as, “features or organizations, such as networks, norms, and trust that facilitate action and cooperation for mutual benefit” (p. 67). In this study, I define social capital as the resources that dwell in family relationships that enable various social outcomes (Coleman 1990).

Weak parental attachments or family relationships hinder a child’s ability to develop parentally favored norms. Coleman’s proposition is that parents cannot transfer their human capital over to their child unless they invest time, training, and interaction (Coleman, 1988; Wright et al., 2001). An adolescent’s academic achievement and other outcomes such as school delinquency is dependent on their parent’s level of involvement (Elliot, 1994; Hill & Tyson,

2009). This approach views adolescent's academic achievement and parents' level of involvement as dependent on one another, working together to either increase or decrease risk of adolescent school delinquency (Hoffman & Dufer, 2008). Parental involvement and parental supervision play an important role in this process: parents who are more involved in their adolescent's schools are also more aware of their behaviors.

Putnam (2000) took social capital one step farther and examined bonding as bridging social capital. Bridging capital refers to the connections that are discussed above. Adolescents benefit from the social and personal connections that their parents have. These connections can be with colleagues, school faculty, neighbors, and friends (Dufer et al. 2008; Cronsnoe 2004). Dufer et al. (2015) stated that, "these connections illustrate bridging social capital; the stronger these connections are, the greater are the resources to which children have access". This bridging capital supports the greater need and purpose of social capital in preventing adolescents from engaging in delinquent behaviors.

When parents make positive investments in their adolescent children, their parental relationships become a form of social capital. The youth who have had positive and forward moving investments from their parents are more likely to be more attached to them, hold positive attitudes, do better in school, and avoid offending into the juvenile justice system (Farrell et al., 1995; Amato & Booth, 1997). This kind of social capital often promotes positive social behavior, deterring youth from the juvenile justice system and associating with delinquent peers (Wright, Cullen, & Miller, 2001).

2.3 Gender, Family Relationships & Delinquency

There have been few studies that have examined gender differences in the effects of family relationships on delinquency involvement among adolescents; however, research shows

gender differences in school delinquency involvement and family relationships (Bottcher, 1995; Chesney-Lind, 1997; Keenan & Shaw, 1997; Kruttschnitt & Giordano, 2009; Fagan, Van Horn, Antaramian, & Hawkins, 2011). Research demonstrates boys and girls typically experience the same risk factors when becoming involved in the juvenile justice system, but greatly differ when it comes to when they are exposed to such factors or how sensitive they will be to those factors (Kruttschnitt & Giordano, 2009; Day, Zahn, & Tichavsky, 2014). Literature suggests that boys and girls are both negatively impacted by the lack of family supervision, maltreatment, family criminality, and neighborhood disadvantage as well (Kruttschnitt & Giordano, 2009).

Family experiences are also different for boys and girls (Kruttschnitt & Giordano, 2009; Fagan Van Horn, Antaramian, & Hawkins, 2011). Previous research suggests that there are gender differences in how parents raise their children (Bottcher, 1995; Hill & Atkinson, 1988; Fagan Van Horn, Antaramian, & Hawkins, 2011): parents are more likely to monitor behavior of their female children and keep them close to home (Kruttschnitt & Giordano, 2009). In contrast to this idea, parents are more likely to tolerate and to not discipline delinquent behaviors from their male children (Fagan Van Horn, Antaramian, & Hawkins, 2011). This leniency in parenting of males promotes males to have more freedom, offering more opportunity for them to engage in delinquent acts. These gender differences in family relationships may help to explain gender differences in rates of delinquency, but also highlight why gender is important in understanding the link between family relationships and delinquency.

These gender differences could be explained through gendered norms and expectations. Morris (2011) explains that gender is not something that we have, but something that we do, and we produce these gendered patterns through our daily social interactions with others. Morris' further argues that that it is not gender itself that causes delinquency, but the expected behaviors

of gender that predict delinquency. While Fagan, Van Horn, Hawkins, and Arthur (2007) suggest that males may engage in more delinquency because of different expectations and responses by parents, such gendered expectations in the home may be intensified in the school environment. Messerschmidt (2000) explains that because of gendered expectations in school settings, adolescent males use delinquency to express masculinity. Males oppose school norms and rules and present risky behavior because that is the expected behavior in that context (Messerschmidt, 2000). Morris' (2011) research has also found that certain situations will prompt adolescent boys to pursue alternative routes to display their masculinity, such as physical contact to avoid behaviors that might be considered feminine.

2.4 Risk & Protective Factors for Delinquency

To best examine the research questions for this study, it is important to account for risk and protective factors for school delinquency. Youth of different races and ethnicities have varying offending pathways in the juvenile justice system. For example, just as black males are incarcerated at much higher rates than white males, this pattern is found in the juvenile justice system as well (Davis & Sorensen, 2006). "In 2003, Black youth represented only 16% of the juvenile population, but comprised 45% of arrests" (Chauhan & Reppucci, 2008, p. 401). Minorities experience higher juvenile justice incarcerations in part due to neighborhood disadvantage, exposure to violence, and socioeconomic status. Focusing on neighborhood disadvantage can help explain the trends in school delinquency among adolescents. Research has found that youth were more likely to participate in self-reported violence if they were from a disadvantaged neighborhood in comparison to youth who did not come from a disadvantaged neighborhood (Chauhan & Reppucci, 2008, p. 402). When growing up or living in a disadvantaged neighborhood, individuals are more likely to experience a variety of negative

experiences such as witnessing violence, deviant peer groups, academic/cognitive difficulties, and familial risk factors such as parental criminality and substance abuse (Chauhan & Reppucci, 2008). Bright and Jonson-Reid (2008) found that youth in high poverty urban areas are considered to live in higher “delinquency areas”. This research suggests that lacking opportunities for success in these urban areas will lead youth to create their own success which often results in juvenile offending. Police behavior can also be linked to urban, high poverty areas because patrolling could be manipulated due to the “nature” of the area. Suggesting that those from urban areas, are policed more often than those from rural areas. Youth who dwell in urban areas and attend schools in urban areas, experience greater levels of delinquency (Zimmerman & Messner, 2016). Zimmerman and Messner (2016) suggests that the gender gap in juvenile justice involvement decreases as the levels of neighborhood disadvantages increase (p. 958). They also discovered that there is a high correlation between neighborhood disadvantage and exposure to delinquent peers, and it is more correlated for males than females, suggesting that males often associate with delinquent peers in disadvantaged neighborhoods.

Depending on what neighborhood an adolescent is from could also reflect their socioeconomic status and social class. Bright and Jonson-Reid (2008) found that there is a common thread between social class or economic status and school delinquency. In fact, research supports that SES does not cause one to become involved in the juvenile justice system, but it is the social issues that surround them due to their socioeconomic status (Agnew, Matthews, Bucher, Welcher, & Keyes, 2008). Adolescents who have less due to their low socioeconomic status, have less to lose by engaging in delinquent behavior (Bright & Johnson-Reid, 2008). Additional data has also found that SES contributes to economic problems such as

family conflict and severe disciplinary techniques that increase the likelihood of juvenile justice involvement in adolescents (Agnew, Matthews, Bucher, Welcher, & Keyes, 2008).

Peer involvement in a youth's life plays an important role in youth offending patterns as well. Due to limited transportation and lack of accessibility to other people, programs, and different socio-economic areas, youth tend to associate with people in their area. Children who have poor relationships with their parents, are likely to associate with delinquent peers and engage in delinquent behavior (Church II, Wharton, & Taylor, 2009). Contact with violent or deviant peers is one of the strongest connections to engagement in delinquent behaviors (Agnew 1991; Elliott 1979; Warr 2002; Zimmerman & Messner 2016). Hayine (2003) explains that girls who are more compared to their peers and more physically developed overall, have more involvement in deviance as well as risk to school delinquency involvement (Hayine, 2003, p. 269). Here we can see how more developed girls are more likely to associate with girls who are like them in development and subconsciously with the similar socio-economic status. Similarly, Piquero, Gover, MacDonald, & Piquero (2005) found that males and females are more likely to be involved in the juvenile justice system because they associate with peers who are involved in delinquent behavior. This research also found that girls who associated with similar groups were also likely to engage in delinquent acts than other girls associated with female peers (p. 253). Much of this research has also suggested that boys are more delinquent than girls because they associate with more delinquent peers (Fagan Van Horn, Antaramian, & Hawkins, 2011).

In educational and school to prison pipeline research, researchers have found that school level factors can reduce the risk of adolescents engaging in juvenile justice involvement. Christle, Jolivette, & Nelson (2005) found that school policies and best practices can intensify the risk for students to enter the juvenile justice system. This research suggests that most adolescents

who are involved in the juvenile justice system experience academic difficulties or failure, school exclusion, and high dropout rates (Lerner & Galambos, 1998; Skiba, Michael, Nardo, & Peterson, 2002; Wald & Losen, 2003). Protective factors such as a positive and safe learning environment, academic opportunity, and high expectations for academic and social success can encourage adolescents to avoid engaging in delinquent acts (Furlong & Morrison, 2000).

Adolescents are often more engaged in school when they have a structured school environment with few problems (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005). Prior research in organizational characteristics related to school crime demonstrates that schools have higher crime rates when their surrounding communities are impoverished, have racial and socioeconomic status inequality, are located in urban areas, and have high crime in the area (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005). This study also analyzed effects of school composition, and the effects of individual demographic factors and found that school composition variables have significant effects on risky behavior and increased behavior problems such as skipping class, dropout rates, absenteeism, and classroom chaos (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005). Many of these studies have concluded that school characteristics and problems are highly related to disorder and poor behavior in schools. In more recent research, (Felson et al. 1994, Brezina et al. 2001, & Ostroff, 1992) positive student-teacher relationships, teacher satisfaction and commitment, creates a positive school environment that can counter fear among students, student drop-out, attendance and behavior problems.

Risk factors outside of school can also contribute to the school delinquency pathway an adolescent can take. Youth who come from low socioeconomic and disadvantaged backgrounds often start their educational career with lower educational aspirations and weak academic skills (Christle, Jolivette, & Nelson 2005). Adolescent and parent educational aspirations often reflect

one another. Parents have been found to be a constant influence on their adolescent children when it comes to educational aspirations (Garg, Kauppi, Lewko, & Urajnik, 2002). As such, student's personal educational aspirations are influenced by their parent's aspirations and goals. Often adolescent students fail to understand or see how their involvement in delinquent behavior can affect their educational attainment. Adolescent educational aspirations and attainment are associated with parental expectations and aspirations (Garg, Kauppi, Lewko, & Urajnik, 2002). That same research also found that regardless the level of educational attainment by parents, parents still have higher expectations for their children (Garg, Kauppi, Lewko, & Urajnik, 2002).

2.5 Current Study

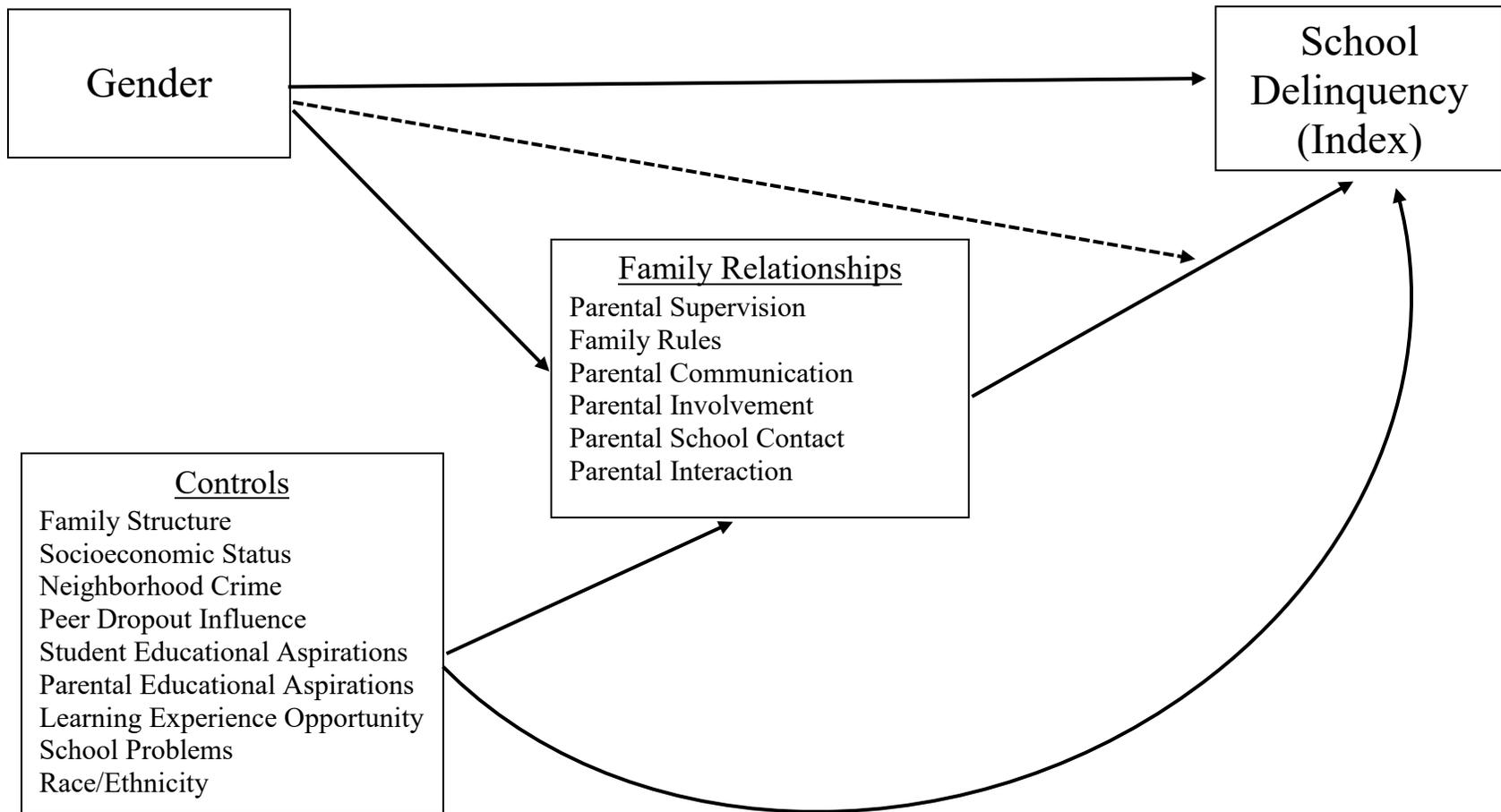
The current study contributes to the literature on delinquency, family relationships, and gender using a quantitative approach. Much of the previous literature has found that family relationships affect an adolescent's likelihood of engaging in delinquent behavior. The unique perspective that my study has is that it simultaneously considers a wide range of family dynamics such as parental supervision, family rules, parental communication, parental school contact, and parental interaction. Examining these different dynamics can contribute to existing literature. In addition, this study examines whether the associations between family relationships and school delinquency vary by gender. Risk and protective factors are also examined frequently to explain school delinquency; therefore, outside risk and protective factors such as race/ethnicity, SES, neighborhood, peer involvement/ dropout, parent and student educational aspirations, family structure, learning experience opportunity, and school problems are considered as control variables.

CHAPTER 3
THEORETICAL MODEL AND HYPOTHESES

3.1 Research Questions

1. How do family relationships shape delinquency?
2. Are there gender differences in delinquency?
3. Are there gender differences in family relationships?
4. Are there gender differences in the association between family relationships and delinquency?

3.2 Theoretical Model



3.3 Discussion of Research Questions

This conceptual model illustrates the predicted relationships between gender, family relationships, and school delinquency. In addition, this model allows for the connection between the different family relationships factors and delinquency and if they vary by gender, to be examined, to best understand the issue of school delinquency, examination of the relationships between family relationship dynamics, students, and school delinquency. For this study, I will examine one dependent variable: school delinquency. Using school delinquency as the dependent variable in this study helps measure the variation of how many times a student is involved in delinquent behaviors at school. To accurately measure gender differences in school delinquency and family relationships, gender interaction terms were created and analyzed separately, so that comparisons between them can be made.

3.3.1 First Model Segment

In the first model segment, gender differences in family relationships are explored. Research suggests that the levels of parenting, or type of family relationships are likely to show differences by gender when comparing those effects to school delinquency involvement among adolescents (Fagan Van Horn, Antaramian, & Hawkins, 2011). Many scholars have looked at this idea in greater detail and have found that because parents often emphasize family relationship for their female children more than males, the consequences of engaging in delinquent acts will be stronger for females and males and females will be less likely to engage in those delinquent acts (Chesney-Lind, 1997; Keenan & Shaw, 1997; Kruttschnitt & Giordano, 2009, Fagan Van Horn, Antaramian, & Hawkins, 2011)

Hypothesis 1: Males will report lower levels of parental supervision, parental interaction, parental communication, family rules, and parental school contact relationships than females.

3.3.2 Second Model Segment

In the second model segment, gender differences in school delinquency will be explored. Because gender differences can be explained by the gendered expectations of male and females in school settings, it is important to measure these differences. While Fagan, Van Horn, Hawkins, and Arthur (2007) suggest that males may engage in more delinquency because of different expectations and responses by parents, such gendered expectations in the home may be intensified in the school environment (Messerschmidt, 2000; Morris, 2011). Because of these gender expectations, I hypothesize that males will engage in more school delinquency.

Hypothesis 2: Males will be engaged in higher levels of school delinquency than females.

3.3.3 Third Model Segment

In the third model segment, delinquency is tested for associations with parental supervision, family rules, parental communication, parental school contact, and parental interaction. Family composition, race/ethnicity, socioeconomic status, neighborhood crime, number of peer dropouts, student's educational aspirations, parental educational aspirations, learning experience opportunity, and school problems are all treated as controls. As previously discussed, studies have found adolescents that have poor family relationships are more likely to engage in risky behavior and become involved in delinquency (e.g., Jang 1999; Jang & Smith 1997; Laub & Sampson 1988; Simons et al. 1994; Simons, Simons, & Wallace 2004; Wadsworth 2000; Wells & Rankin 1991). Adolescents who have increased parental supervision, are found to be less delinquent than those who do not have increased parental supervision (Rankin & Kern 1994; Sokol-Katz, Dunham, & Zimmerman 1997; Wiatrowski, Griswold, & Roberts 1981). Many families implement rules in their home for their children to abide by. Adolescents who

were given family rules to follow within their home are also found to be less delinquent than those who have no family rules to follow. Frequent communication between adolescent children and their parents has also been seen to lead to adolescent children who are involved in fewer delinquent acts. When parents supervise their children more, they are less likely to engage in delinquent acts (Demuth & Brown 2004; Jang & Smith 1997; Wadsworth 2000; Warr 2005; Loeber & Stouthamer-Loeber 1986; Patterson & Dishion 1985). Additionally, other research indicates that adolescents who have more parental interaction in their lives, tend to engage in less delinquent activities (Walters, 2013; Hoeve, Dubas, Gerris, van der Laan, & Smeenk, 2011; Simons et al. 1994). Many studies on delinquency and family relationships, as does this one, focus on the differences in these relationships. When relationships are examined, they have consistently been shown to be associated with an adolescent's delinquency involvement. Based on these factors, I would expect that the more disciplined adolescents are in their family relationships, such as increased supervision, enforced family rules, frequent communication, school contact, and consistent interaction will decrease the likelihood and frequency of adolescent youth becoming involved in school delinquency.

Hypothesis 3: Parental supervision, family rules, parental communication, parental school contact, and parental interaction will be inversely associated with school delinquency.

3.3.4 Fourth Model Segment

Finally, gender interaction terms are tested to determine differences in the associations between family relationships and delinquency. Research demonstrates that males and females experience the same risk factors for engaging in delinquency, but are exposed to these factors at different rates and have different sensitivity to these factors (Day, Zahn, & Tichavsky, 2014). In fact, research states that males and female's involvement in the juvenile justice system greatly

differ when they have different family relationship with their parents (Krutterschnitt & Giordano, 2009; Fagan Van Horn, Antaramian, & Hawkins, 2011). Considering these details from previous literature, I would expect that more positive family relationships would decrease school delinquency for both males and females, but more so for males.

Hypothesis 4: Positive associations between family relationship variables and school delinquency will be stronger for males than for females.

CHAPTER 4

METHODS

4.1 Data

The data for this study was obtained from the Educational Longitudinal Study of 2002 (ELS). This data was funded by the National Center for Education Statistics (NCES). All variables used in this study are publicly available through the NCES. The initial data collection started in 2002 and there were follow-ups done in 2004, 2006, and 2012. The method was probability sampling and national probability selection which was a two-stage process of schools including public, private, and Catholic schools in the United States. Out of those schools selected, 10th grade students were then randomly selected to participate in the study. The complete sample included, 15,362 student respondents, 13,488 parent respondents, 7,135 teachers, 743 administrators, and 718 librarians. The overall response rate for schools was 68%. The overall response rate for students was 87%. Though there are multiple waves of follow up data available, only the first wave of data from 2002 was utilized in this study. The base year of data from 2002 was utilized because it offered consistent measures of school delinquency and family relationship variables. ELS is well suited for examining school delinquency as it provides a diverse sample as well as information about family structure and family relationships to better understand if race, gender, and family relationships associate with school juvenile delinquency.

4.2 Sample

The data for this study was restricted for analysis purposes. It was necessary to remove cases from the data who did not have complete questionnaires to ensure best analysis of school delinquency. The sample was further restricted to students whose parents and school

administrators who entirely completed their questionnaires. Students were not included if they were missing on the dependent variable, school delinquency. Cases missing on parental supervision, family rules, parental communication, parental school contact, and parental interaction variables were not included for analysis. To account for missing values on peer drop out, the cases were split by another variable, peer attendance. This variable asked respondent's how important it is for friends to attend class regularly. To impute for missing cases for student educational aspirations and parental educational aspirations for child, the cases were split by standardized composite test quartile, and the median for each quartile was used. Due to the large number of missing cases on the school problems variable (14.1%), imputation was not done and cases were dropped from the sample. Only students with valid sampling weight were selected in this sample. A sampling weight was calculated by ELS researchers to account for the over or under sampling of the sample population, 10th graders in the U.S. A relative weight was created by dividing each case's given weight by the mean of all case weights in my restricted sample. Creating the relative weight was important to construct and apply to the sample to make it more reflective of the target population. After all sample selections, had been completed a total of 8,169 respondents were included for analysis.

4.3 Variables

4.3.1 Dependent Variable

The school delinquency variable was constructed from a set of variables asking a range of delinquency questions plus one other delinquency question. Students were asked "how many times cut/skip class", "how many times absent from school", "how many times got in trouble", and "how many times late for school". The respondent answers were coded as how many times a student engaged in these activities. 1 is coded as "never", 2 is coded as "1-2 times", 3 is coded

as “3-6 times”, 4 is coded as “7-9 times”, and 5 is coded as “10 or more times”. Students were also asked how many times they had "got into a physical fight". The respondent answers were coded as how many times a student engaged in these activities. 1 is coded as "never", 2 coded as "once or twice", and 3 coded as "more than twice". These variables were condensed down into 3 categories for analysis purposes. These variables were coded as 1 “never” 2 “1-2 times” 3 “3 or more times”. Respondents did not have high frequency rates for 7-9 times and 10 or more times, so they were categorized with 3 or more times. This variable was constructed into an index which measures how many times a student is involved in school delinquency. Across these 5 items, this variable ranges from 0 to 2 in which 0 indicates never being involved in school delinquency and 2 indicates being involved with school delinquency 3 or more times. All missing cases were dropped from this constructed variable. This index helps measure the variation of how many times a student is involved in school delinquency.

4.3.2 Independent Variables

4.3.2.1 Family Relationships

To best measure family relationships, several variables were examined. These variables are parental communication, parental supervision, parental school contact, parental interaction, and family rules.

Family relationships such as parental communication can help shape school delinquency. For this independent variable, a series of nine questions provided by ELS will be used to measure parental communication. Some of these questions are, “how often discussed school courses with parents”, “how often discussed grades with parents”, “how often discussed school activities with parents”, and “how often discussed troubling things with parents”. These variables were coded as 1 “never”, 2 for “sometimes”, and 3 for “often”. One question was

removed from this group of questions for better analysis. This question was removed because the Cronbach's Alpha is higher without it. A reliability test was run on eight questions and produced a Cronbach's Alpha of .858, indicating that a fair amount of the variables correlate with one another. A scale was constructed from these 8 items. The index's values range from 1 to 3, where a 1 indicates no parental communication and 3 indicates frequent parental communication. To account for missing values on parental communication variable, missing values were imputed by using the mean.

Students are asked about their helps and check their homework and if there are special privileges for good grades, or limited privileges due to poor grades. For this parental supervision variable, and series of questions provided by ELS were used to measure parental supervision. Some of these questions are, "how often parent helps with homework", "how often parent checks homework", "special privileges given for good grades", and "parents limit privileges due to poor grades". These variables were coded as 1 "never", 2 "rarely", 3 "sometimes", and 4 "often". A reliability test was run on these questions and produced a Cronbach's Alpha of .688, indicating that a fair amount of the variable correlate with one another. A scale was constructed out of the four questions to measure the level of parental supervision a student has. The scale's values range from 1 to 4, where 1 indicates no parental supervision and 4 indicates frequent supervision. To account for missing values on the parental supervision variable, missing values were imputed by using the mean.

Parents were asked questions about how often and for what reasons they contact their child's school. ELS provided a set of ten questions. Some of these questions are, "parent contacted school about poor performance", "parent contacted school about school program for year", "parent contacted school about poor attendance", and "parent contacted school about

problem behavior”. These questions were coded as 1 “none”, 2 “once or twice”, 3 “three or four times”, and 4 “more than four times”. A reliability test was run on those ten items and produced a Cronbach’s Alpha of .753 indicating that a fair amount of the variables correlate with one another. A scale was constructed from these ten items that ranges from 1 to 4, in which 1 indicates that a parent did not contact their child’s school, and 4 indicates that the parent contacted the school more frequently. To account for missing values on the parental school contact variable, missing values were imputed by using the mean.

Students were asked questions about having family rules to follow when they are at home. ELS provided a set of questions that ask what kind of family rules a student might have. Some of those questions are “required to work around the house”, “parents limit TV watching or video games”, and “parents limit time with friends”. These questions were coded as 1 “never”, 2 “rarely”, 3 “sometimes”, and 4 “often”. Four questions were removed from this group of questions because they did not relate to students having family rules to follow at home. An index was constructed to measure how many family rules a student has at home. This index ranges from 1 to 4, in which 1 indicates that there are no family rules to follow at home, and a 4 indicates they have more family rules to follow at home. To account for missing values on the family rules variable, missing values were imputed by using the mean.

Parents were asked questions about their interaction with their child. ELS provided a set of questions that ask what kind of interactions they have with their child. Some of those questions are “attended sports events outside of school”, “took day trips/ vacations”, “went shopping”, and “spent time talking”. These questions were coded as 1 “never”, 2 “rarely”, 3 “sometimes”, and 4 “frequently”. Two items were removed from this group because they were not associated with parent’s interacting with their child outside of school. An index was

constructed to measure how much interaction a parent had with their child. This index ranges from 1 to 4, in which a 1 indicates a parent did nothing with their child, and a 4 means a child had more frequent interaction with their parent. To account for missing values on the parental interaction variable, missing values were imputed by using the mean.

4.3.3 Controls

A sex-composite variable provided by ELS will be used to examine the sex of respondents. Sex was recoded into 0 for “male” and 1 for “female”.

Race/Ethnicity, family structure, socioeconomic status, neighborhood crime, peer dropout influence, student educational aspirations, parental educational aspirations for their child, learning experience opportunity, educational confidence, and school problems were treated as controls for all segments of the model.

In the ELS dataset, a race variable is included with 7 different categories. For those who responded, the variable was then recoded into a variable with only 5 different categories for analysis. Participants who responded as American Indian or Native Alaskan or more than one race were combined into one variable because of a small sample size. This category of respondents was coded “other, non-Hispanic”. The two Hispanic options, “Hispanic, no race specified” and “Hispanic, race specified” they were combined and coded into the same variable, “Hispanic”. The other three variables were coded as “Asian, non-Hispanic”, “Black, non-Hispanic”, and “White, non-Hispanic”. In this study, White, non-Hispanic is the reference category.

Family structure is a composite variable produced by ELS which indicates the composition of a family. Parents were the respondent for this question. This variable was coded into nine different categories. “Mother and father”, “mother and male guardian”, “father and

female guardian”, “two guardians”, “mother only”, “father only”, “female guardian only”, “male guardian only”, and “lives with student less than half time”. These categories were condensed down into 4 categories to better examine the associated in of family relationship and school delinquency. These categories were coded as “biological two-parent families”, “step-families”, “single- parent families”, and “other families”.

I examined the extent in which socioeconomic status is related to school delinquency. I used a continuous measure of socioeconomic status as a control variable that is a composite of socioeconomic characteristic provided by ELS. This composite variable is comprised of 5 variables that include: father’s education, mother’s education, income, father’s occupation, and mother’s occupation. Both composite socioeconomic status variables provided by ELS utilize prestige values that are continuous. I have chosen to use the first composite provided by ELS because preliminary analysis indicated a distribution closer to normal.

Parents of students were asked about the crime in their neighborhood. This variable was coded into three different categories: “High level of crime”, “moderate level of crime”, and “low level of crime”. Because there was not enough variation between moderate levels of crime and high levels of crime, they were collapsed into one category. This variable was coded into a dichotomous variable. The two new categories were coded as “moderate or high level of crime”, and “low level of crime”. This variable helps explain the levels of crime in a student’s neighborhood.

Students were asked how many of their friends have dropped out of school. This variable is coded into four different categories. 1 was coded as “none of them”, 2 “some of them”, 3 “most of them”, and 4 “all of them”. Because there was not enough variation between the responses of most of them and all of them, they were collapsed into one category. This variable

was recoded with three categories. The new categories were coded as 1 “none of them”, 2 “some of them”, and 3 “most of them”. To account for missing values on peer drop out, the cases were split by another variable, peer attendance. This variable asked respondent’s how important it is for friends to attend class regularly. The median of this variable was used to impute missing cases for the peer drop out variable.

Students were also asked about their educational aspirations. Students were asked how far in school he/she will get. There were seven possible categories. These categories were coded as 1 “less than high school graduation”, 2 “high school graduation or GED only”, 3 “attend or complete 2-year college/school”, 4 “attend college, 4-year degree incomplete”, 5 “graduate from college”, 6 “obtain Master ’s degree or equivalent”, or 7 obtain PhD, MD, or other advanced degree. Responses were combined and condensed into fewer categories. Those categories were coded as, 1 “less than high school graduation”, 2 “graduate from high school or GED”, 3 “graduate from college”, 4 “obtain Master’s degree or equivalent”, and 5 “obtain PhD, MD, or other advanced degree”. To account for missing cases for student educational aspirations, the cases were split by another variable, standardized composite test quartile. The median of this variable was used to impute missing cases for student educational aspirations.

Parents were asked the educational aspirations they have for their child. Parents were asked how far in school they thought their child would get. There were seven possible categories. These categories were coded as 1 “less than high school graduation”, 2 “high school graduation or GED only”, 3 “attend or complete 2-year college/school”, 4 “attend college, 4-year degree incomplete”, 5 “graduate from college”, 6 “obtain Master ’s degree or equivalent”, or 7 obtain PhD, MD, or other advanced degree. Responses were combined and condensed into fewer categories to be in the same metric and direction as the student educational aspirations

variable. Those categories were coded as, 1 “less than high school graduation”, 2 “graduate from high school or GED”, 3 “graduate from college”, 4 “obtain Master’s degree or equivalent”, and 5 “obtain PhD, MD, or other advanced degree”. For consistency, the categories for student educational aspirations and parental educational aspirations were coded the same. To account for missing cases for parental educational aspirations for child, the cases were split by another variable, standardized composite test quartile. The median of this variable was used to impute missing cases for parental educational aspirations for child.

Students were asked questions about learning experience opportunities they have had the opportunity to participate in. ELS provided a set of questions that ask what kind of opportunities they participated in. Some of those questions are “participated in cooperative-education”, “participated in internship”, “participated in mentoring”, and “participated in community service”. These questions were coded as dummy variables with 0 as “no” and 1 as “yes”. These 7 items were constructed into an index to measure how many learning experience opportunities students participated in. This index’s range is from 1 to 7, in which 1 indicates fewer opportunities students participated in and 7 indicated the most opportunities the student participated in to measure a student’s learning experience opportunities.

School administrators were asked questions about how many times school problems occur at their school. ELS provides a set of 19 questions asking administrators school problems at their school and how often they occur. Some of these questions were “physical conflicts a problem at school”, “robbery or theft a problem at school”, “drugs or alcohol at school a problem”, and “class cutting a problem at school”. These questions were coded as 1 “happens daily”, 2 “happens at least once a week”, 3 “happens at least once a month”, 4 “happens on occasion”, 5 “never happens”. A reliability test was ran on nineteen questions and produced a

Cronbach's Alpha of .857, indicating that a fair amount of the variables correlate with one another. A scale was constructed from these questions. This scale ranges from 22 to 77 in which 22 indicates "no school problems" and 77 indicates "many school problems everyday". This scale is efficient for measuring how many school problems a school administrator reports having.

4.4 Plan of Analysis

To address the first research question about associations between family relationships and delinquency, Pearson's r tests were conducted to examine the associations between school delinquency and parental supervision, family rules, parental communication, parental school contact, and parental interaction. My second research question asked if there are gender differences in delinquency. An independent samples t -test was conducted to evaluate if males or females reported different levels of school delinquency. To address my third research question on if there are gender differences in family relationships, independent samples t -tests were conducted to examine the differences between males and females on parental supervision, family rules, parental communication, parental school contact, and parental interaction.

Finally, to further explore the associations between family relationships and delinquency, an Ordinary Least Squares, or OLS Regression were conducted. An OLS Regression was conducted because of the measure of my dependent variable, school delinquency is a continuous variable. Model 1 tests for associations between delinquency and parental supervision, family rules, parental communication, parental school contact, and parental interaction while controlling for family structure, SES, neighborhood crime, number of peer dropouts, student educational aspirations, parental educational aspirations, learning experience opportunities, school problems, and race/ ethnicity. In Model 2, gender interaction terms were tested to answer my fourth and final research question on if there are gender differences in the association between family relationships and delinquency.

CHAPTER 5

RESULTS

5.1 Univariate Analysis

Descriptive statistics are displayed in Table 1 for all ordinal and interval-ratio level variables. Frequencies for all nominal level variables can be found in Table 2.

5.1.1 School Delinquency

The construction of this variable, school delinquency is described in the methods section. This variable helps measure the variation of how many times a student is involved in school delinquency. The range of this variable is 0 to 2. In this index, a 0 indicates never being involved in any of the types of school delinquency, a 2 indicates that the respondent reported engaging in every type of school delinquency 3 or more times. The smaller the number in this index, the fewer times the respondent was involved in school delinquency. On average students reported having low levels of school delinquency with the mean being .69 and standard deviation of .42 (Table 1), indicating that most students reported never being involved in school delinquency. This variable is not normally distributed and the mean (.69) and median (.60) are similar.

5.1.2 Family Relationships

The primary independent variables for this study are parental supervision, family rules, parental communication, parental interaction, and parental school contact.

Parental supervision ranges from 1 to 4. This variable measure how often a parent helps and checks their child's homework and if special privileges are given or limited due to poor grades. The average score was 2.74, which was between rarely (2) and sometimes (3), with a standard deviation of .75 (Table 1). This variable is not normally distributed.

Students were asked if they have certain family rules enforced at home. This variable ranges from 1 to 4. Family rules measure how often students have family rules such as working around the house, or limited hours of watching television. The mean was 2.73, which is between rarely (2) and sometimes (3), with a standard deviation of .75 (Table 1). This variable is not normally distributed.

The parental communication variable measures how often a student communicates school related topics with their parent. This variable ranges from 1 to 3. On average, students reported that they sometimes had communication about school topics with their parent with an average score of 2.11 and a standard deviation of .48 (Table 1). This variable is not normally distributed.

Parental school contact is an independent variable that measures how many times a parent contacts their child's school regarding school related matters this variable ranges from 1 to 4. On average, parents contacted their child's school once or twice about school related matters with an average score of 1.34 and a standard deviation of .37 (Table 1). This variable is not normally distributed and is positively skewed to the left indicating that that most parents did not contact their child's school.

For the last independent variable, the amount of interaction a parent had with their child outside of school-related tasks was measured for analysis. This variable ranges from 1 to 4. On average parents reported that they sometimes interact with their child outside of school with an average response score of 3.17 and standard deviation of .48 (Table 1). This variable is not normally distributed.

5.1.3 Student Characteristics

In terms of race/ethnicity 70.1% of the sample were categorized as non-Hispanic, White, 12.4% as Hispanic, 9.7% as non-Hispanic, Black, and non-Hispanic Asian, and non-Hispanic,

Other made up 7.8% of the sample population (Table 2). Gender was categorized into two categories where males made up 48.0% of the sample and females made up 52.0% of the sample (Table 2).

Control variables that were analyzed for this study are family structure, socioeconomic status, neighborhood crime, peer dropout influence, student educational aspirations, and parental educational aspirations for child, learning experience opportunity, school confidence, and school problems. Table 1 and Table 2 will show the frequencies and descriptive statistics for these variables.

Family structure explains the family composition of the sample. This variable has been recoded into fewer categories to best describe the makeup of the family and can be found on Table 2. Sixty one percent of the sample reported being part of a two-parent biological family. Twenty percent of the sample reported being part of a single-parent family. Sixteen percent reported being part of a step family, whereas 3.5% reported being part of some other kind of family arrangement (e.g. living with one parent part of the year).

Socioeconomic status is a composite score produced by ELS. The mean of this variable is .10 with a standard deviation of .71 (Table 1). This variable has been standardized to best reflect the z score that is relative to a student's socioeconomic rank, a mean of .10 indicates the sample is somewhat skewed to students who are middle to high socioeconomic status.

The level of neighborhood crime was examined as a control variable. Parents were asked about the level of crime in their neighborhood. 9.7% of respondents reported living in a neighborhood of moderate or high level of crime and 90.3% reported living in a neighborhood of low level crime (Table 2).

Students were asked about how many close friends they have who have dropped out of school. Students could respond to either none of them, some of them, and most of them. 84.3% of respondents expressed that none of their close friends had dropped out of school, 14.1% stated that some of their friends had dropped out of school, and 1.5% stated that most of their close friends had dropped out of school (Table 2).

When asked about their educational aspirations, on average, students score was 5.27 with a standard deviation of 1.30 (Table 1). This variable ranges from 1 to 7. A 1 indicates that a student aspires less than high school graduation and a 7 indicates that a student has educational aspirations to obtain a PhD, MD, or other advanced degree. The smaller the number, the lower the student's educational aspirations. This variable is not evenly distributed and suggests that more students have average to higher educational aspirations.

When parents were asked about their educational aspirations for their child, their average response was the average score for parental educational aspirations is 4.94 with a standard deviation of 1.37 (Table 1). This variable also ranges from 1 to 7 to best compare to student's educational aspirations. A 1 indicates that a parent aspires less than high school graduation and a 7 indicates that a student has educational aspirations to obtain a PhD, MD, or other advanced degree for their child. The smaller the number, the lower the parent's aspirations are for their child. This variable is also not evenly distributed, suggesting that parents have high educational aspirations for their child, though slightly lower than the students' own educational aspirations.

Many students had the opportunity to participate in a learning experience opportunity. This index ranges from 1 to 7. In this index, a 1 indicates that students engaged in 1 learning experience opportunity, and a 7 indicates that they participated in all the different learning experience opportunities. The smaller the number in this index, the fewer learning experiences

the student engaged in. Students could participate in several learning experience opportunities and the average number of opportunities students participated in is 1.02 with a standard deviation of 1.33 (Table 1). The distribution of this variable suggests that majority of students participated in few learning experience opportunities.

Administrators were asked about their school's problems and how often that they occur at their school. This scale ranges from 1.16 to 4.05. A 1 on this scale indicates that school problems never happen at their school, and a 5 indicates that problems happen daily. On average, how often school problems occur at an administrator's school is 2.53 with a standard deviation of .37 (Table 1). This suggests that school problems tend to happen on occasion. Responses cluster themselves around this mean with declining on either side, suggesting that the number of school problems is consistent at all schools.

5.2 Bivariate Analysis

5.2.1 Family Relationships & Delinquency

Correlations were produced as a part of bivariate analysis examining family relationships and school delinquency. Pearson's r product is used to examine the strength of the association between school delinquency and family relationships that might influence school delinquency. As mentioned above, the dependent variable, school delinquency is measured as "0" indicating never being involved in any of the types of school delinquency and a "2" indicating that the respondent reported engaging in every type of school delinquency three or more times. The smaller the number in this index, the fewer times the respondent was involved in school delinquency. A correlation test indicates that there is a negative but weak correlation ($-.044$, $p < .001$) between parental supervision and school delinquency (See Table 3). Respondent's reported that the more their parents supervised them, the fewer times the respondent was

involved in school delinquency. A correlation test indicates that there is also a negative but weak correlation ($-.135, p < .001$) between family rules and school delinquency. The more family rules a student has at home, the fewer times the respondent was involved in school delinquency. A correlation test indicates that there is a weak negative correlation ($-.191, p < .001$) between parental communication and school delinquency. The more a parent communicated school related topics with their child, the fewer times they were involved in school delinquency. A correlation test indicates that there is a weak positive correlation ($.174, p < .001$) between parental school contact and school delinquency. The more a parent contacted their child's school, the more times they were involved in school delinquency. Finally, a correlation test indicates that there is a weak negative correlation ($-.084, p < .001$) between parental interaction and school delinquency. The more interaction a parent had with their child outside of school related tasks, the fewer times they were involved in school delinquency.

To better understand how these key independent variables, associate with one another, we can also examine Pearson's r product to evaluate the strength of the association between these key independent variables. Most of these relationships are weak to moderate associations. There is a moderate correlation between parental communication and parental interaction ($.216, p < .001$), socioeconomic status ($.241, p < .001$), student educational aspirations for child ($.341, p < .001$), parental educational aspiration for child ($.277, p < .001$) (See Table 3). Respondents who reported having more parental communication reported having more parental interaction as well. Respondents who had more parental communication, have higher socioeconomic status than others. Those who reported having more parental communication also reported having higher educational aspirations for both the student and parent. Lastly, those who had more parental communication also had more school confidence. A correlation test indicates that there is a

moderate correlation (.431, $p < .001$) between parental supervision and family rules (See Table 3). Respondent's reported that the more their parents supervised them, the more family rules they had in their household. Parental supervision is significantly correlated with parental school contact (.103 $p < .001$) and parental interaction (.162 $p < .001$).

5.2.2 Gender & Delinquency

Table 4 displays descriptive statistics by gender as well as results of an independent samples t-test to examine the relationship between gender and delinquency. An independent samples t-test was conducted to evaluate if males or females reported more acts of school delinquency levels (See Table 4). Males ($\bar{x} = .73$) did report being involved in school delinquency more than females ($\bar{x} = .66$). The difference was statistically significant ($t = 7.49$ $p < .001$), but this significant was not meaningful per a Cohen's d test ($d < .20$).

5.2.3 Gender & Family Relationships

An independent samples t-test was conducted to evaluate if males or females reported differences in family relationships (See Table 4). Males ($\bar{x} = 2.75$) reported having more parental supervision than females ($\bar{x} = 2.72$). Though this difference is small, it is statistically significant ($t = 2.104$ $p < .01$), but this significance was not meaningful per a Cohen's d test ($d < .20$). Males ($\bar{x} = 2.73$) and females ($\bar{x} = 2.73$) reported having the same number of family rules in their household. Males ($\bar{x} = 2.04$) reported having less parental communication about school related topics than woman ($\bar{x} = 2.17$), and this difference was found to be statistically significant, and meaningful per a Cohen's d test ($t = -12.151$) ($d < .20$). Males ($\bar{x} = 1.37$) reported having their parents contact the school more times than females ($\bar{x} = 1.31$). This difference is statistically significant ($t = 6.55$ $p < .001$), but the difference was not meaningful per a Cohen's d test ($d < .20$). Males ($\bar{x} = 3.15$) reported having slightly less parental interaction outside of school related topics

than females ($\bar{x}=3.19$), but this statistic was not found to be statistically significant ($t=-3.896$). There was a significant difference between male and female student's parental supervision and parental school contact. The mean was higher for male students, compared to female students for both variables.

5.2.4 Controls

Finally, bivariate associations between the dependent variable, school delinquency, and control variables were analyzed. A one-way analysis of variance was conducted to evaluate the relationship between school delinquency and family composition (See Table 5). Single parent families reported having students with higher levels of school delinquency ($\bar{x}= .79$). While biological two parent families reported having students with the lowest levels of school delinquency ($\bar{x}= .65$). Biological two parent families had lower levels of school delinquency compared to all other families (which were significantly different). In comparison to step families ($\bar{x}= .73$), single parent families reported having significantly fewer students with school delinquency. Therefore, there does appear to be a strong relationship between school delinquency and family composition ($F= 57.947$ $p<.001$) that can be generalized to the population.

A one-way analysis of variance was conducted to evaluate the relationship between school delinquency and number of peer drop outs (See Table 6). Respondents who reported that most of their peers dropped out of school reported having the highest level of school delinquency ($\bar{x}= 1.06$). While those who reported that none of them had the lowest levels of school delinquency (which were significantly different) ($\bar{x}= 0.65$). There does appear to be a strong relationship between school delinquency and peer drop out ($F=262.19$ $p<.001$) that can be generalized to the population.

A one-way analysis of variance was conducted to evaluate the relationship between school delinquency and the race/ethnicity of the respondent (See Table 7). Hispanic respondents ($\bar{x}=0.79$) and Other, non-Hispanic respondents ($\bar{x}=0.79$) reported the highest level of school delinquency. While Black, non-Hispanic ($\bar{x}=0.75$) respondents reported similar levels of delinquency (which were not significantly different). White, non-Hispanic ($\bar{x}=0.67$) respondents reported a low level of school delinquency while Asian, non-Hispanic reported the lowest levels of school delinquency ($\bar{x}=0.57$). There does appear to be a relationship between school delinquency and race/ethnicity ($F=33.507$ $p<.001$) that can be generalized to the population.

An independent samples t-test was conducted to evaluate if the level of crime in a neighborhood is associated with school delinquency (See Table 8). Students who live in moderate to high level crime neighborhoods ($\bar{x}=0.79$) report having more school delinquency than low level crime neighborhoods ($\bar{x}=0.68$). The difference is statistically significant ($t=6.730$, $p<.05$), but per a Cohen's d test this significance is not meaningful ($d<.20$).

An important component to consider in this study is how control variables are related to other control variables. Students who are disadvantaged by one control variable, may very well be disadvantaged by other variables indirectly. There is a moderate correlation ($.290$ $p<.001$) between socioeconomic status and student educational aspirations (See Table 3). Respondents had higher educational aspirations who reported having higher socioeconomic status. There is also a moderate correlation ($.288$ $p<.001$) between socioeconomic status and parental educational aspirations. Respondents who reported having a higher socioeconomic status, the higher their parent's educational aspirations were for their child. There is a strong correlation ($.480$ $p<.001$) between student educational aspirations and parental educational aspirations for child (See Table 3). The higher a student's educational aspirations are, the higher their parent's educational

aspirations are for their child. Student educational aspirations did not seem to be related to learning experience opportunity, school confidence, or school problems.

A chi-square test was used to determine the association between gender and level of crime in neighborhood (See table 4). The results show that 49.3% of males live in a neighborhood that has moderate levels of crime compared to 50.7% of females. The chi-square value ($\chi^2 = .594$) indicates that this difference is not significant. A chi-square test was used to determine the association between gender and family composition (See table 4). Sixty three percent of males are from a biological two parent family compared to 59% of females. Seventeen percent of females come from a step family compared to 15% of males. Twenty one percent of females come from a single parent family compared to 19% of females. Lastly, 4% of females come from other families compared to 3% of males. The chi-square value ($\chi^2 = 15.08$) indicates that there is a statistically significant association between gender and their family composition.

A chi-square test was used to determine the association between gender and the number of close friends who have dropped out of school (See Table 4). The results show that 85.5% of males have none of their close friends drop out of school while 82.9% of females have none of their close friends drop out of school. While 1.6% of male's report having most of their friends drop out of school compared to 1.5% of females. However, 15.5% of females have some friends who have dropped out of school compared to 12.6% of males. The chi-square value ($\chi^2 = .14.289$, $p < .01$) indicates that there is a statistically significant association between gender and the number of close friends who have dropped out of school. Males are more likely to have fewer friends dropped out of school compared to females.

5.3 Multivariate Analysis

5.3.1 Model 1

An ordinary least squares regression analysis regression was conducted to evaluate how well the variables gender, parental supervision, family rules, parental communication, parental school contact, parental interaction predict students' level of school delinquency (See table 9). Control variables were also evaluated to understand how well family composition, race/ethnicity, socio-economic status, level of crime in neighborhood, number of friends who have dropped out, student educational aspirations, participation in learning experience opportunity, parental educational aspirations for their child, and school problems predict the amount of school delinquency a student might have.

For this analysis, the dependent variable was distributed evenly. None of the independent variables were correlated over .70 with any other independent variable. This suggests that multicollinearity was not a problem. Tests for outliers also were conducted. The number of outliers in the sample was less than 1% of the total sample, so outliers were not removed. The maximum found in the Mahalanobis distance test was 151.36. The general guideline for the Mahalanobis test is that outliers more than 25 could apply an unwarranted effort on the regression effort however, the Cook's distance test was less than 1.

Family relationships variables were all found to be statistically significant, suggesting that family relationships between parent and child do predict variation in school delinquency, net of all control variables (Table 9). For every unit increase in parental supervision, there is a .018 increase in school delinquency for students. This suggests that the more supervision a student has the higher their level of school delinquency. Though this is significant, this is a very small effect. This is a counter-intuitive finding which I will discuss below. For every additional family rule for students at home, there is a .044 decrease in school delinquency. The more family rules a

student has at home, the less delinquent they are on average. For every unit increase in parental communication, there is a .08 decrease in school delinquency. This suggests that the more parental communication a student has the lower their level of school delinquency. For every unit increase in parental school contact, there is a .16 increase in school delinquency. This suggests that the more parents contact the school about their child, the higher their level of school delinquency. This is a counter-intuitive finding for this family relationship variable which will be discussed in the next section. For every unit increase in parental interaction, there is a .03 decrease in school delinquency. This suggests that the less parental interaction a student has the lower their level of school delinquency. These were all statistically significant relationships.

A 1 standard deviation increase in socio-economic status, is associated with a .01 increase in school delinquency. Females are predicted to be less delinquent in school than males by .03 on the school delinquency scale. Black students ($b=.03$), and Hispanic students ($b=.07$), and students from other racial/ethnic groups ($b=.076$) are predicted to be more delinquent in school in comparison to Whites. However, Asian students ($b=.05$), are predicted to be less delinquent in school than Whites, net of all other factors. These findings were statistically significant. Students who come from single parent families ($b=.08$), are predicted to be more delinquent in school compared to students who come from biological two parent families. This was found to be statistically significant, net of all other factors.

Students who live in low level crime neighborhoods have, on average, a .03 point lower level of school delinquency than those who live in moderate level crime neighborhoods (See table 9). Students who have no friends drop out of school have a school delinquency level .23, points lower than those who had most of their friends drop out of school. Students who have some of their friends drop out of school have, on average, a .04 point lower level of school

delinquency than those who had most of their friends drop out. This suggests that the fewer friends a student has that have dropped out of school, the lower their level of school delinquency will be. For every 1 unit increase in students' educational aspirations, there is a .03 decrease in school delinquency. For every 1 unit increase in parents' educational aspirations for their child, there is a .02 decrease in school delinquency. This suggests that students and parents who have plans for obtaining more advanced degrees, the lower their level of school delinquency will be. These were both found to be statistically significant, net of all other factors. For every 1 unit increase in student' school problems, there is a .07 increase in school delinquency. This suggests that students who attend a school with many school problems, the higher their level of school delinquency will be. Participating in a school learning experience opportunity is not significantly associated with school delinquency. The adjusted R^2 of this model is .158 ($p < .001$), stating the variables explain 16% of the variation in school delinquency. (Table 9).

Comparing the standardized betas, having no friends drop out of school had the largest impact with a standardized beta of .202 (Table 9). Parental school contact had the next largest impact with a standardized beta of .140. Parental communication and student educational aspirations also seem to have a greater effect on school delinquency than other variables. Parental school contact had the largest impact on school delinquency with a standardized beta of .140, compared to other dimensions of family relationships. Parental communication had the second largest impact on school delinquency with a standardized beta of -.090. Family rules had the third largest impact on school delinquency with a standardized beta of -.078.

5.3.2 Model 2

Gender interaction terms were added to the second model to test gender differences in association between family relationships and delinquency (See table 9). The interaction terms

between gender and parental supervision was not statistically significant, suggesting that the association between parental supervision and school delinquency was similar for males and females. Family rules is negatively related to delinquency and the interaction term between gender and family rules was not statistically significant, indicating that there is no gender difference in the association between family rules and delinquency. The interaction term between gender and parental communication was also not statistically significant, suggesting that there is no gender difference in the association between parental communication and school delinquency. The interaction term between gender and parental interaction was not statistically significant, suggesting that there is not gender difference in the association between parental interaction and school delinquency. The interaction term between gender and parental school contact was negative and statistically significant, suggesting that there is a gender difference in the association between parental school contact and school delinquency. The estimated effect of parental school contact on school delinquency is .186 for males ($.186 + (-.057)*0 = .186$) and .129 for females ($.186 + (-.057)*1 = .186 - .057 = .129$). This suggests while parental school contact is positively related to delinquency for both males and females, it has a stronger association for males. This suggests that both males and females who have parents contact their school more have more school delinquency, but this is stronger for males. I will further discuss this finding in the discussion section below. The adjusted R^2 of this model is .158 ($p < .001$), stating the variables explain 16% of the variation in school delinquency. (Table 9).

CHAPTER 6

DISCUSSION

The purpose of this study was to examine the relationship between school delinquency and family dynamics and how those relationships vary by gender. Social capital theory can best explain why these family relationships matter in school delinquency. All dimensions of family relationships were found to be associated with school delinquency. The only family relationship variable that varied by gender was parental school contact, suggesting that for the most part, family relationships matter similarly for male and female students' delinquency. However, parental school contact is more strongly associated with males' school delinquency, though it was positively related to delinquency for females as well. In the next section, I discuss possible explanations for these findings as well as their implications.

6.1 Family Relationships & School Delinquency

My first research question asked about how family relationships shape delinquency. The hypothesis associated with this research question is Hypothesis 3: all dimensions of family relationships, parental supervision, family rules, parental communication, parental school contact, and parental interaction will be inversely associated with school delinquency. All dimensions of family relationships were found to be correlated with school delinquency. The more family rules, communication, and interaction children had with their parents, the fewer times they were involved in school delinquency. Previous literature suggests that parents' level of involvement with their child is likely to predict school delinquency (Cernkovich & Giordano 1987; Rankin & Kerns, 1994; Sokol-Katz & Dunham, 1997; Davalos, Chavez, & Guardiola, 2005; Demuth & Brown, 2004; Rhodes & Jason, 1990). Those students who reported having

more family interaction and communication with their parents were involved in lower levels of school delinquency.

Findings also suggest that the more times a parent contacted their child's school, the more times the student was involved in school delinquency. This finding was inconsistent with my expectations and was not supported by previous literature. Previous research tells us that students whose parents contact their child's school more experience fewer school problems, or school delinquency (Davalos, Chazez, & Guardialo, 2005). This counter intuitive finding could be explained by the measurement of the parental school contact variable. This variable includes both positive and negative reasons for school contact. Parents contacting their child's school is not what makes a student delinquent; rather, it is when a child is in trouble or involved in school delinquency that a parent would contact their school. Given the cross-sectional nature of this study, this seems the most likely explanation for the positive relationship between parent-school contact and delinquent behavior. Like parental school contact, I found the same counter-intuitive finding for parental supervision. Previous research demonstrates that, youth who have more parental supervision, the less involved in delinquency they will be (Demuth & Brown 2004; Jang & Smith 1997; Wadsworth 2000; Warr 2005; Patterson & Dishion 1985). Research also suggests that parents who actively monitor their children's behavior, reward positive behavior, and discipline negative behavior, will reduce the possibility of delinquent behavior (Gottfredson & Hirschi, 1990; Capaldi & Patterson, 1996; Hawkins, Arthur, & Catalano, 1995). I argue that when a child is involved in delinquent behavior, parents increase their level of supervision. This can help explain why I found a positive relationship between parental supervision and school delinquency. I also found that males reported more parental supervision and parental school contact while females reported more parental interaction and parental communication, and males

also had higher rates of delinquency. In addition, I found that when males engage in delinquent behavior, they have higher levels of parental school contact and parental supervision.

Social capital theory provides us with an explanation that the quality of family relationships affect the diffusion of social capital from parents to their children (Wright, Cullen, & Miller, 2001). Coleman's (1988) proposition tells us that unless parents are spending quality time with their child, then their social capital will not be passed on. Without this social capital being instilled in a child, that students' academic achievement and other outcomes, like school delinquency is at risk. The relationships that are built between parents, teachers, and others can also be interpreted as a form of social capital. The relationships that students make with their parents, teachers, and others can be used to communicate norms and discourage poor behavior (Dufer et al., 2015). Students tremendously benefit from the connections that their parents have with colleagues, school faculty, neighbors, and friends (Dufer et al. 2008; Cronsnoe 2004). Dufer (2015) demonstrates that the stronger these connections are, the more resources made available for their children. My results were consistent with this theory and suggests that examining the quality of family relationships is important to understanding school delinquency. This study shows the importance of social capital for preventing adolescents from engaging in delinquent behaviors.

6.2 Gender Differences in Delinquency

My second research question asked are there gender differences in school delinquency? The hypothesis associated with this research question is Hypothesis 2: males will be engaged in more school delinquency than females. As supported by literature, males reported being involved in school delinquency more than females, and this difference was statistically significant. Research demonstrates that parents are more likely to monitor their female children

more and keep them close to home, while parents are more likely to tolerate and not discipline risky behavior from their male children (Krutterschnitt & Giordano, 2009; Fagan Van Horn, Antaramian, & Hawkins, 2011). This leniency in parenting of males promotes males to have more freedom, offering more opportunity for them to engage in delinquent acts. Contrary to this idea, because females spend more time at home with their parents and family, they are less likely to engage in delinquency because of the risk of disappointment in their family relationships (Rebellon, Manasse, Agney, Van Gundy, & Cohn, 2015; Farrington & Painter, 2003; Blistein, et al., 2005). These differences in family relationships can help explain the gender differences found in my study. Examining gender differences in family relationships can help explain the gender differences in school delinquency. My findings can be explained through gendered expectations (Morris, 2011). Morris' work suggests that gender something we that we do, and we produce these patterns through daily interactions with others. Because of the gendered expectations in families and in schools, males may engage in more risk-taking and aggressive behavior, leading to higher levels of delinquency compared to females (Messerschmidt, 2000). The idea of gender expectations can explain why there is a gender difference in school delinquency and why males report higher levels of school delinquency.

6.3 Gender Differences in Family Relationships

My third research question asked if there are gender differences in family relationships. The hypothesis associate with this research question is Hypothesis 1: males will report lower levels of parental supervision, parental interaction, parental communication, family rules, and parental school contact relationships than females. I found that males reported higher levels of supervision and parental school contact than females. This is contrary to previous research which finds that parents are more likely to monitor the behavior of their female children, keep

them close to home, and reinforce the idea pro-social behavior more than males (Krutterschnitt & Giordano, 2009). In contrast to this idea, parents are more likely to accept, or not discipline delinquent behaviors from their male children (Fagan Van Horn, Antaramian, & Hawkins, 2011). This suggests that the leniency in parental supervision of males, promotes males to have more freedom, offering plenty of opportunity for them to engage in school delinquency. However, I found the opposite to be true of parental supervision. I think that this finding suggests that parents supervise their male children as a result of their higher levels of delinquency. In other words, it is not that parents are supervising their female children less than their male children, but there are supervising their male children more because they are involved in delinquency more.

Though males reported having more parental supervision and parental school contact, females reported having more parental communication and parental interaction than males. Literature demonstrates that students who have good communication with their parents have healthy psychological development in knowing what is prosocial behavior, and what is not (Davidson & Cardemil, 2009). Other studies have found that strong communication between parent and child can promote other healthy relationships and prevent delinquent behavior (Davison & Cardemil, 2009; Huff, Widner, & McCoy, 2003; Clark & Shields, 1997; Caprara et al., 1998). Females reported having more parental interaction than males. Parental interaction, or how much time a parent spends with their child outside of school, is a crucial protective factor to consider while examining school delinquency. Rhodes and Jason (1990), found that of the most influential factors in school delinquency is family interaction. They also argue that parents who invest more time in their children tend to have fewer children involved with delinquent acts, or drug use (Jason & Rhodes, 1990). This literature supports why females would engage in less

delinquent behavior based on the increased levels of parental interaction they have compared to males. Females may be less involved in school delinquency in part because they have more parental interaction encouraging them from engaging in such risky behaviors that could endanger their future.

6.4 Gender, Family, & Delinquency

My fourth research question asked if there were gender differences in the association between family relationships and school delinquency. School delinquency was tested for associations with parental supervision, family rules, parental communication, parental school contact, and parental interaction. The hypothesis associated with this research question is Hypothesis 4: positive association between family relationships and school delinquency will be stronger for males than for females. Gender interaction terms were tested to determine the differences in association between family relationships and delinquency. There was no association between parental supervision, family rules, parental communication, parental interaction and school delinquency was similar for male and female students. The only family relationship found to have a stronger association for males than females was parental school contact. This positive relationship between parental school contact and males suggests that parents respond to their child's delinquency at school with increased contact. Because males are more involved in delinquency overall, we can expect that they will also have more parental school contact as well.

I found that there were not gender differences for most family relationship variables. Research would suggest that the levels of parenting or types of family relationships are likely to show differences by gender when comparing effects of school delinquency (Fagan, Van Horn, Antaramian, & Hawkins, 2011). Not finding this gender difference could be because of the

gender differences in how parents raise their children. While I did find gender differences in both delinquency and family relationships, relationships for the most part seem to have the same impact on delinquency. This can be explained through social capital theory. Coleman (1990) discusses social capital as the networks of relationships, such as family relationships, that enable effective and successful functioning in society. Coleman's theory of social capital states that parents are unable to transfer their capital over to their children unless they invest their time, training, and interaction in their relationship (Coleman, 1988; Wright et al., 2001). An adolescent's academic achievement and other outcomes such as school delinquency is dependent on their parent's level of involvement (Elliot, 1994; Hill & Tyson, 2009). Through this approach, students are likely to engage in less delinquency and do better in school if their parent interacts with them proactively (Hoffman & Dufer, 2008).

6.5 Limitations & Future Research

This study was not without limitations. The first limitation that this study has is that it utilizes cross-sectional data and cannot address causality. Because it is cross-sectional, the data that was analyzed was from one period in time. I was unable to analyze changes in family relationships to determine their effect on school delinquency. School delinquency and family dynamics change over time, and it is important to track these changes (Rankin & Kern 1994; Sokol-Katz, Dunham, & Zimmerman 1997; Wiatrowski, Griswold, & Roberts 1981). It is also not possible to know if students were describing their family relationships before, during, or after an adolescent encountered school delinquency. Unfortunately, this data does not capture the progression of these attributes over time and just accounts for the base year of 2002. Perhaps another limitation of this study is the limited measure of the dependent variable, school delinquency. School delinquency was self-reported variable which may not be the most

appropriate way to measure a student's delinquent activity. I also believe that there are more useful questions such as: engagement in risky behaviors, negative attitudes toward law enforcement, or any type of contact with law enforcement (arrested, adjudicated, and detained) could be asked to more appropriately gauge an adolescent's delinquency (Department of Justice, 2017).

Another limitation is the age of the data. The first survey of the Educational Longitudinal Study was collected in 2002, now making this data 15 years of age. School disciplinary protocols have vastly changed since 2002. What was once not considered to be a delinquent act in school, may not be considered to be delinquent today and vice versa. Through the school-to-prison pipeline literature, we know that students are suspended, expelled, and even arrested for engaging in school delinquency (Gonzalez, 2012; Wald, & Losen, 2003; Christle, Jolivette, & Nelson, 2010). When these students are pushed out of school, the well-being of that student is jeopardized. The limitations of not knowing how many times a student engaged in school delinquency involvement is crucial to understanding the severity of school delinquency students engage in.

Results from this study suggest that family dynamics and social capital are important factors in an adolescent's chances of encountering delinquency at school or on school grounds. Future research should attempt to assess if there are other family relationship dynamics that contribute to school delinquency. I think that it would be beneficial to dissect family relationship variables more precisely to indicate if those family relationships are "happening" before, during, or after school delinquency started. I also think that this study highlights the importance of other relationships students have. These outside relationships could be a friend, or a mentor through a mentoring program. Mentoring programs provide the opportunity of a positive relationship with an adolescent. This mentoring can provide an adolescent with

dynamics of relationships that they lack from their parents, empowering them to steer clear of delinquent behavior. The relationship with this mentor can also contribute to a form of social capital for the adolescent. The relationship between mentor and student can create opportunity of resources youth can engage in. The more resources students' have access to, the less likely they will be involved in delinquency.

CHAPTER 7

CONCLUSION

There are several implications from the study's findings. While it was expected that there would be an association between family dynamics and an adolescent's school delinquency involvement, this finding was not as strong as what previous literature has suggested. Coleman's theory of social capital provides insight into the implications of this study for schools, policy makers, and those who work with youth. Coleman's proposition of social capital is that parents cannot transfer their human capital over to their child unless they spend quality time with them (Wright et al., 2001). Developing social capital thus requires an investment of time, training, and interaction (Coleman, 1988). The more involvement adolescents have from their parents, the more capital they have to take positive paths in life and avoid delinquency. Previous research demonstrates that adolescents who have positive, strong family relationships, are less likely to engage in school delinquency (e.g., Cernkovich & Giordano 1987; Laub & Sampson 1988; Van Voorhis et al. 1988, Demuth & Brown, 2004). However, while families may be the most important relationships, they are not the only ones that matter. Relationships with fellow classmates, teachers, administrators, and others can also be a form of capital that can prevent a student from in engaging in school delinquency.

Next to those aspects of family relationships found to have the biggest impact on school delinquency (parental school contact, parental communication, and family rules), it is important to recognize that there are other risk and protective factors that shape school delinquency as well. Some of these factors are race/ethnicity, socioeconomic background, family structure, neighborhood level of crime, peer characteristics, parent and student educational aspirations, learning experience opportunities, and school problems. Risk factors outside of school can

contribute to the school delinquency pathway an adolescent can take. Youth who come from low socioeconomic and disadvantaged backgrounds often start their educational career with lower educational aspirations and weak academic skills (Christle, Jolivette, & Nelson, 2005). Prior research in organizational characteristics related to school crime demonstrates that schools have higher crime rates if they are located in urban communities or communities with higher poverty, racial and socioeconomic inequality, and crime (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005). Ideally, school institutions should increase their awareness of students' risk and protective factors when disciplining students who are involved in school delinquency. Because of these risk and protective factors, support should be offered to students with these disadvantaged backgrounds when faced with delinquency.

One of the most important implications is the importance of preventative programs that provide supportive, wrap around services for students who are struggling with school delinquency. From past literature, we know that students who engage in delinquency at school may continue their delinquency involvement throughout their remaining school days and into their adult careers (Gonzalez, 2012; Wald, & Losen, 2003; Christle, Jolivette, & Nelson, 2010). Students' academic success and well-being are put at risk when they are faced with the consequences of school delinquency. Preventative programs can provide services to students to help reduce rates of school delinquency, better integrate students back into a normal routine of academic success, encourage the development of positive family relationships, and create resources for them. (Greenwood, 2003; Lipsey, Howell, Marion, Chapman, & Carver, 2010, Wasserman, Miller, & Cothorn, 2000). Wrap around, supportive services from preventative programs can provide students who have poor family relationships the opportunity to succeed (Moffit, 2008; Farrington, 2004) by providing healthy and proactive mentors for students in

need. These services can focus on students' academic success, family relationships, mental and physical health, mentorship, and provide a service of empowerment. Thus providing supportive and preventative programs that will engage students involved in delinquency as well as their families is crucial to their well-being and academic success.

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APPENDIX

Table 1. *Univariate Analysis Descriptives*

Variables	Mean	Median	S.D.	Range
<i>Dependent Variable</i>				
School Delinquency	0.69	0.60	0.42	0.00-2.00
<i>Family Relationship Variables</i>				
Parental Supervision	2.74	2.75	0.75	1.00-4.00
Family Rules	2.73	2.67	0.75	1.00-4.00
Parental Communication	2.11	2.13	0.48	1.00-3.00
Parental School Contact	1.34	1.20	0.37	1.00-4.00
Parental Interaction	3.17	3.20	0.48	1.00-4.00
<i>Control Variables</i>				
Socioeconomic Status	0.10	0.12	0.71	-1.97-1.82
Student Educational Aspirations	5.27	5.00	1.30	1.00-7.00
Parental Educational Aspirations for Child	4.94	5.00	1.37	1.00-7.00
Learning Experience Opportunity	1.02	0.00	1.33	1.00-7.00
School Problems	2.53	2.50	0.37	1.16-4.05

N = 8169

Source: Educational Longitudinal Study of 2002: Base Year

Table 2. *Univariate Analysis Frequencies*

<u>Variables</u>	<u>N</u>	<u>Percent</u>
Gender		
Male	3921	48.0%
Female	4248	52.0%
Race/Ethnicity		
Other non-Hispanic	367	4.5%
Asian, non-Hispanic	267	3.3%
Black, non-Hispanic	790	9.7%
Hispanic	1014	12.4%
White, non-Hispanic	5730	70.1%
Family Composition		
Biological two-parent families	4947	60.6%
Step families	1303	16.0%
Single-parent families	1632	20.0%
Other families	287	3.5%
Level of Crime in Neighborhood		
High level of crime	795	9.7%
Low level of crime	7374	90.3%
Peer Dropouts		
None of them	6887	84.3%
Some of them	1156	14.1%
Most of them	126	1.5%

N = 8169

Source: Educational Longitudinal Study of 2002: Base Year

Table 3.
Zero-Order Correlation Among Study Variables

Variables	1	2	3	4	5	6	7	8	9	10	11
1.Parental Supervision	-										
2.Family Rules	.431***	-									
3.Parental Communication	.426***	.320***	-								
4.Parental School Contact	.103***	.037**	.020	-							
5.Parental Interaction	.162***	.114***	.216***	.146***	-						
6.Socioeconomic Status	.067***	.141***	.241***	.066***	.290***	-					
7.Student Educational Aspirations	.055***	.148***	.341***	-.072***	.288***	.290***	-				
8.Parental Educational Aspirations for Child	.004	.117***	.277***	-.100***	.056***	.288***	.480***	-			
9.Learning Experience Opportunity	.081***	.069***	.185***	.040***	.057***	.056***	.077***	.026*	-		
10.School Problems	.032**	0.02	-.026*	0.00	-.050***	-.068***	-.035*	0.013	-.019	-	
11.School Delinquency	-.044***	-.135***	-.191***	.174***	-.084***	-.121***	-.224***	-.204***	-.014	.087***	-

Note: *p< .05, **p<.01, ***p< .001

Note: Control Variables Are Not Shown

N= 8169

Source: Educational Longitudinal Study of 2002: Base Year

Table 4.

Descriptive Statistics by Gender (N=8169)

Variable	Male		Female		T-Test	Cohen's d	X ²
	mean	s.d.	mean	s.d.			
<i>Dependent Variable</i>							
School Delinquency	0.73	0.45	0.66	0.39	7.49	***	0.16
<i>Family Relationship Variables</i>							
Parental Supervision	2.75	0.77	2.72	0.73	2.10	**	0.05
Family Rules	2.73	0.76	2.73	0.74	-0.15		0.00
Parental Communication	2.04	0.49	2.17	0.47	-12.15	***	0.26
Parental School Contact	1.37	0.39	1.31	0.35	6.55	***	0.14
Parental Interaction	3.15	0.48	3.19	0.49	-3.89		0.09
<i>Family Composition</i>							
Biological Two Parent Families	0.63		0.59				15.08 **
Step Families	0.15		0.17				
Single Parent Families	0.19		0.21				
Other Families	0.03		0.04				
<i>Neighborhood Crime</i>							
Moderate Level of Crime	0.49		0.51				0.594
Low Level of Crime	0.48		0.52				
<i>Number of Friends Who Have Dropped Out</i>							
None of Them	0.86		0.83				14.289 **
Some of Them	0.13		0.16				
Most of Them	0.02		0.02				
<i>Race/Ethnicity</i>							
Other, non-Hispanic	0.04		0.05				4.882
Asian, non-Hispanic	0.03		0.03				
Black, non-Hispanic	0.09		0.10				
Hispanic	0.13		0.12				
White, non-Hispanic	0.71		0.70				

Note: *p< .05, **p<.01, ***p< .001

N= 8169

Source: Educational Longitudinal Study of 2002: Base Year

Table 5.

F-Tests for Difference School Delinquency by Family Composition

Variable	Biological Two Parent Families		Step Families		Single Parent Families		Other Families		F-Test
	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	
School Delinquency	0.65	0.40	0.73	0.43	0.79	0.44	0.78	0.44	57.947***

Note: *p< .05, **p<.01, ***p< .001

N= 8169

Source: Educational Longitudinal Study of 2002: Base Year

Table 6.

F-Tests for Difference in School Delinquency by Number of Peer Drop Outs

Variable	None of Them		Some of Them		Most of Them		F-Test
	mean	s.d.	mean	s.d.	mean	s.d.	
School Delinquency	0.65	0.39	0.92	0.47	1.06	0.54	262.193***

Note: *p< .05, **p<.01, ***p< .001

N= 8169

Source: Educational Longitudinal Study of 2002: Base Year

Table 7.

F-Tests for Difference in School Delinquency by Race/Ethnicity

Variable	Other, non-Hispanic		Asian, non-Hispanic		Black, non-Hispanic		Hispanic		White, non-Hispanic		F- Test
	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	
School Delinquency	0.79	0.43	0.57	0.42	0.75	0.42	0.79	0.44	0.67	0.41	33.507***

Note: *p< .05, **p<.01, ***p< .001

N= 8169

Source: Educational Longitudinal Study of 2002: Base Year

Table 8.

T-Tests for Difference by Level of Crime in Neighborhood (N=8169)

Variable	Moderate Level of Crime		Low Level of Crime		T-test	Cohen's d
	mean	s.d.	mean	s.d.		
School Delinquency	0.79	0.44	0.68	0.42	6.730*	0.16

Note: *p< .05, **p<.01, ***p< .001

N= 8169

Table 9. Ordinary Least Squares Regression Results for School Deviance

Variables	Model 1			Model 2				
	Unstandardized Coefficients		Standardized Coefficients	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error B	Beta	B	Std. Error B	Beta		
Sex (Male=Reference)								
Female	-.035	.009	-.041	***	.014	.070	.016	
Family Relationships								
Parental Supervision	.018	.007	.031	**	.009	.010	.015	
Family Rules	-.044	.007	-.078	***	-.042	.009	-.075	***
Parental Communication	-.079	.011	-.090	***	-.075	.015	-.086	***
Parental School Contact	.160	.012	.140	***	.186	.016	.163	***
Parental Interaction	-.032	.009	-.037	**	-.033	.014	-.038	**
Family Composition (Biological Two Parent Families= Reference)								
Step Families	.027	.012	.024		.027	.012	.024	*
Single Parent Families	.086	.012	.081	***	.086	.012	.081	***
Other Families	.024	.024	.011		.023	.024	.010	
Race/Ethnicity (White=Reference)								
Other	.076	.021	.038	***	.078	.021	.038	***
Asian	-.058	.025	-.024	*	-.057	.025	-.024	*
Black	.036	.016	.025	*	.036	.016	.025	*
Hispanic	.077	.014	.060	***	.078	.014	.061	***
Socio-economic Status	.017	.007	.028	*	.017	.007	.028	**
Level of Crime In Neighborhood (Moderate Level= Reference)								
Low Level of Crime	-.037	.015	-.026	**	-.037	.015	-.026	**
Number of Friends Who Have Dropped Out (Most of Them=Reference)								
No Friends	-.234	.035	-.202	***	-.233	.035	-.201	***
Some Friends	-.039	.037	-.032		-.037	.037	-.031	
School								
Student Educational Aspirations	-.030	.004	-.093	***	-.030	.004	-.092	***
Participated In Learning Experience Opportunity	.005	.003	.015		.005	.003	.015	
Parental Educational Aspirations for Child	-.023	.004	-.076	***	-.023	.004	-.076	***
School Problems	.068	.012	.060	***	.068	.012	.060	***
Interaction Terms								
Parental Supervision X Female					.019	.014	.066	
Family Rules X Female					-.003	.013	-.011	
Parental Communication X Female					-.010	.020	-.028	
Parental School Contact X Female					-.057	.024	-.094	**
Parental Interaction X Female					.002	.019	.007	
<i>Adjusted R</i> ²		0.158				0.158		
<i>F</i>		72.893***				59.165***		
<i>N</i>		8101				8101		

Note: *p< .05, **p<.01, ***p< .001

N= 8169

Source: Educational Longitudinal Study of 2002: Base Year