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Parental Supervision and Monitoring and Deviant Adolescent Behavior

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Walden University

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Abstract

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by

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CAGS, Howard University, 1998

MEd, Howard University, 1995

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Deviant adolescent behavior is a social crisis in the United States, estimated at an annual cost of over $4 billion; yet there are gaps in the research on parental influences regarding this behavior. In this study, the principles of social learning theory were used to examine the relationships between parental supervision and deviant adolescent behavior as moderated by self-control and socioeconomic status. The population for this quantitative study consisted of 87 parent volunteers who completed surveys measuring parent supervision, child executive functioning, and delinquent behavior as well as demographic information such as socioeconomic status. Multiple Regression/Correlation was used to examine the relations between variables. There was a significant negative predictive relationship between high levels of parental supervision and deviant adolescent behavior, indicating that the more an adult was available the less deviant behavior was exhibited. In addition, self-control was a significant negative moderator between parental supervision and deviant adolescent behavior, which suggests that certain "child effects" also influence this relationship. Overall, the findings supported social learning theory, which maintains that parents are a primary factor in the conforming and/or nonconforming tendencies in adolescents and identified bidirectional effects in the relationship between parental supervision and deviant adolescent behaviors. Additional research is needed to offer more specificity on the processes that underlie these parent and child relationships, to develop interventions and supports for families, schools, and communities, and to encourage positive social change.

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Dedication

My dissertation is dedicated to my family, whose love and support sustained me throughout this process. To my husband, I thank you for your strength and your support during the course of my studies. You managed our home and family when my studies called for me to travel away from home for weeks at a time. To my sons, you are my inspiration for this research. It is my hope that my continued education will encourage you to return to school to obtain a higher education and to complete a course of study that interests you. To my adolescent daughter, who many times felt that I was not paying enough attention to her because I was "always working" on my dissertation, please know that I was paying attention. I think that you have turned out to be a very poised, charming, and sophisticated young lady, and I am very proud to call you my daughter. I chose to complete the online program at Walden University to be close to you all and at home while working toward my doctoral degree. Moreover, I thank God for this opportunity as I have come to know that with God, all things are possible.

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Chapter 1: Introduction to the Study

Introduction

Adolescence is a critical stage of human development characterized by significant biological, psychological, and social changes (Holmbeck et al., 2000). During puberty, adolescents experience certain biological changes, such as neuroendocrine changes (Negriff & Susman, 2011) and maturation of brain structures (Steinberg, 2009). Adolescents also experience certain hormonal and physiological changes, such as growth spurts, changes in body and facial features, fluctuating hormonal levels, as well as the emergence of both their sexual interest and reproductive capability, which for some adolescents may cause adjustment concerns that are stressful and can psychologically affect an adolescent's adjustment, mood, and behavior (Negriff & Susman, 2011). Adolescence is also a time of more social or peer involvement as well as the opportunity to demonstrate greater independence from their parents (Keijsers et al., 2012).

However, the maturational deviance hypothesis proposes that early maturation, such as in the premature development and autonomy of adolescents, may lead to greater social pressures as they are likely to socialize with older peers and have greater opportunities and pressure to engage in risk taking behavior. It has been suggested that adequate parental supervision and monitoring may help the adolescent successfully navigate through this critical period of human development (Keijsers et al., 2012). To facilitate a better understanding of this critical stage of development, I explored the association between parental supervision and monitoring as moderated by certain

psychological and social factors in the prediction of deviant behaviors in middle and high school students. I also emphasized two underlying moderating psychosocial factors, self-control and socioeconomic status (SES), that may someday contribute to the development of theories on both normal and atypical adolescent development. In this chapter, the background, problem statement, purpose of the study, research questions and hypothesis, conceptual framework, nature of the study, definitions, assumptions and limitations, and the significance of the study are addressed.

Background

Deviant adolescent behaviors include, but are not limited to, problem behaviors displayed at home, legal charges faced in the community, and poor school conduct. Poor school behaviors include substance use, physical assault, destruction of property, and weapons in school (U.S. Department of Education, 2016). Deviant school behavior often leads to school disciplinary action, as a result of the zero-tolerance policy, which is the mandated-response approach to school discipline in the United States (American Psychological Association Zero Tolerance Task Force, 2008). School disciplinary action, in the form of school suspension or expulsion, then places adolescents at risk for other antisocial and illegal behaviors, such as substance abuse and a lack of vocational success, crime, and violence, which in turn lead to juvenile justice system involvement, a phenomenon often referred to by researchers as the "school-to-prison-pipeline" (Monahan, VanDerhei, Bechtold, & Cauffman, 2014). Further, race and gender disparities for deviant adolescent school behaviors have been noted in the literature.

Minority students, particularly Black males, are disproportionately represented in disciplinary hearings in the schools (U.S. Department of Education, 2014) and account for 27% of law enforcement referrals and 31% of school related arrests (U.S. Department of Education, Office of Civil Rights, 2014).

Coles, Greene, and Braithwaite (2002) noted that the number of arrest rates for adolescents had once exceeded 2,000,000 for such crimes as larceny and theft and that trend data showed that crimes became more violent as the youth became older. Coles et al. reported that the Centers for Disease Control and Prevention Youth Violence Fact Sheet for the year 2000 data showed that the arrest rates for adolescents had declined since 1997 but remained quite high. The Centers for Disease Control and Prevention noted that in 1997, 1,700 young adults under the age of 18 were implicated in more than 1,400 murders, which was the lowest number of youth homicide perpetrators in a decade (as cited in Thorton, Craft, Dahlberg, Lynch, & Baer, 2000). More recent juvenile crime and arrest data has shown that there continues to be a modest 2% decline in overall juvenile arrests (Puzzanchera, 2009). Further, according to the American Correctional Association, the average daily cost of incarcerating one youth nationwide is approximately $241; likewise, the annual cost ranges from $66,000 to $88,000 (Mendel, 2011). Adolescent delinquency has been costly to society.

Deviant adolescent behaviors occur for many different reasons. Parental supervision and monitoring during adolescent development were found to be central to the problem. Dishion, Nelson, and Bullock (2004) suggested that during puberty, many

parents tend to relinquish support and monitoring of their adolescents at around ages 13 to 14, a period referred to as "premature autonomy (p. 516). This low level of parental supervision and monitoring often occurs at the same age at which adolescents tend to pull away from parental involvement and began to become more involved in social activities with peers. In some cases, these peers participate in deviant activities (Dishion et al., 2004). At the other extreme, there are parents whose high levels of supervision and monitoring involve more controlling forms of tracking and surveillance (Stattin & Kerr, 2000). Researchers have suggested that these more controlling techniques also lead to poor adjustment in adolescents (Keijsers et al., 2012; Stattin & Kerr, 2000).

Further, deviance in adolescence can also have long-term, psychosocial effects and interfere with an adolescent's ability to accomplish such developmental tasks as succeeding in school, having healthy relationships, and entering the workforce (Brodbeck, Bachmann, Croudace, & Brown, 2013). Brodbeck et al. (2013) reported that a higher frequency and persistence of deviant adolescent behaviors was significantly correlated ($p < .001$) with negative long-term outcomes, such as substance abuse and dependency or low psychosocial adjustment.

Another explanation of the intraindividual characteristics that influence deviance in adolescence lie in the psychological and sociocultural contexts into which one is born and raised. Dodge and Petit (2003) used a biopsychosocial model to study the development of chronic conduct problems in adolescents. They proposed a developmental model that suggested that in addition to the biological predispositions and

sociocultural contexts into which a child is born, early life experiences, especially with parents, peers, and social institutions (schools), also contributed to conduct problems in adolescents (Dodge & Petit, 2003). Dodge and Petit showed that harsh treatment, rejection of the self, and failure place a child at later risk for conduct problems.

Dodge and Petit (2003) also noted that family socioeconomic status at birth is "one of the strongest and most consistent of all risk factors for later conduct problems throughout childhood and adolescent years" (p. 352). When these biological and psychological factors were considered together with certain sociocultural factors, such as the economic status of the adolescent's family as measured by the income, occupation, and education of the parents, the aforementioned biopsychosocial factors helped to explain the parent-deviance association (Dodge & Petit, 2003). Flay (2002) proposed a comprehensive model of psychosocial behavior that drew from several leading developmental theories and provided testable hypotheses and results about causal processes, including mediating, moderating, and interactional effects. Flay contended that different problem behaviors cluster and have the same underlying causes. There have been numerous studies of deviance, delinquency, substance abuse, at-risk sexual behavior, and the co-occurrence of these in adolescence; however, the implications of the moderating psychosocial factors that underlie these behaviors were unclear.

A better understanding of adolescent development can be used to inform public policy about such things as child labor laws, driving privileges, and criminal prosecution. In this study, I explain those underlying processes that contribute to deviant adolescent

behavior. There were gaps in the research literature on the association between parental supervision and monitoring, or the lack thereof, and how certain psychosocial factors contribute to deviant adolescent behaviors.

As a result, social learning theory (Akers, 1985), which outlines a dynamic process that includes both reciprocal and feedback effects as well as the principle that behavior can be differentially reinforced by its consequences, was used as the theoretical foundation for this study. Social learning theory explains that differential association with conforming and/or nonconforming significant others typically precedes one's behavior and that families are the primary group in this process. Akers (1985) suggested that conforming and/or nonconforming behavior occurs prior to the onset of any acts of delinquency or law violation and that deviant tendencies have already developed based on the functions of previously learned patterns of behavior within the family that made them more attracted by and/or attractive to other deviant associations (e.g., friendships, circumstances, and preferences). Akers suggested that children and adolescents may also be influenced by observing behavioral models in their social environments. Uncovering the underlying processes that contribute to deviant adolescent behaviors can provide an important contribution to future prevention research.

Problem Statement

In this study, I explored the relationship between parental supervision and monitoring and deviant adolescent behavior as moderated by certain psychosocial factors, including self-control and SES, in middle and high school students. Very little was

known about the possible antecedents of parental supervision and monitoring and its influence on deviance. Salari and Thorell (2015) replicated the Stattin and Kerr (2000) study on parental monitoring and deviant adolescent behavior and extended their findings to Attention Deficient Hyperactivity Disorder (ADHD) symptoms. They showed that child disclosure was the main source of parental knowledge and not parental solicitation and control (Salari & Thorell, 2015). They found that early behavior problems were associated with parental knowledge and child disclosure (Salari & Thorell, 2015). Salari and Thorell noted that the parent child relationship is a general construct and that further studies are needed to improve the understanding of what specific aspects of this relationship are important for adolescent development.

Copeland-Linder, Lambert, Chen, and Ialongo (2011) studied the effects of risk and resilience factors and also called for more research on parental monitoring in reducing deviant behaviors, such as violence and substance use in adolescence. They explained that in addition to the physical and cognitive changes during the adolescent stage of development, increased stressors occur (e.g., adjustments to new schools, increased academic challenges, peer pressure, romantic relationships, and puberty), which also contribute to either risk or resiliency (Copeland-Linder et al., 2011). The Copeland-Linder et al. study was in response to the call of the American Psychological Association (APA) Task Force on Resilience and Strength in Black Children and Adolescents (as cited in Copeland-Linder et al., 2011) and studied resilience factors in ethnic minority youth.

More recently, Benson and Buehler (2012) used a psychosocial approach to study family and peer influence of deviant adolescent behavior. They found that family hostility and peer deviance were positively associated with adolescent aggression (Benson & Buehler, 2012). Benson and Buehler noted that economic resources fail to ensure protection from risks, as positive associations of family income with rates of marijuana usage and binge drinking were also reported. It was stated that "adolescents from middle and upper-income families experience achievement pressures, perfectionistic strivings, and deficits in supervision and closeness, that compromise development" (as cited in Benson & Buehler, 2012, p. 1215).

Other characteristics of the family, such as low parental education and younger parental age, were also associated with the parental influence of the development of deviance in adolescents (Racz & McMahon, 2011). Crosswhite and Kerpelman (2009) reviewed the empirical and theoretical evidence and noted that while a number of factors influenced deviance in adolescence, such as social factors (e.g., low SES), parental influence was strongly identified. They also suggested that the coercion process was influential in the etiology of self-control (Crosswhite & Kerpelman, 2009). Crosswhite and Kerpelman noted that constructs associated with social learning theory have not been adequately considered and should be explored in future research. A psychosocial approach was used as the theoretical focus of this study of parental influence on deviant adolescent behavior.

There is a gap in the research literature as to a deeper developmental perspective of how parenting influences the etiology of deviance in adolescence. Most of the extant research has not adequately addressed the complex underlying processes that occur throughout adolescent development. Two potential moderating psychosocial factors, self-control and SES, which are believed to help explain the link between parental supervision and monitoring and deviant adolescent behavior, were also explored in this study. With a better understanding of how effective and ineffective parenting influences deviance, intervention and prevention efforts can be tailored to meet the needs of children, adolescents, and families and serve to decrease deviant adolescent behavior. An understanding of the parental influences of the etiology of deviant adolescent behavior may also contribute to the development of theories on both normal and atypical adolescent development.

Purpose of the Study

In this study, I explored the relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by self-control and socioeconomic status (SES) in middle and high school students. This quantitative study was nonexperimental in nature in that the data were not directly manipulated, and I specifically used a cross-sectional, survey research design because of the economy of this design and because of the quick turnaround of data collection.

The independent variables included (a) parental supervision, which is a more controlling form of tracking and surveillance; (b) premature autonomy, which is a much

less controlling form of parental supervision; and (c) parental monitoring, which is simply an awareness of an adolescent's daily activities as measured by parental report. The dependent variable was the parental report of any behavior that may result in disciplinary action (e.g., poor school conduct, substance use, physical assault, destruction of property, weapons in school, crime, and violence) whether at home, at school, or in the community. Moderating variables included self-control (Crosswhite & Kerpelman, 2009) as measured by parental report and SES of the adolescent's family as measured by the self-report of the marital status, education, occupation, and income of the parents. Various measures were used to assess these variables, including: (a) the Supervision Questionnaire: Primary Caretaker (SQPC) to measure parental supervision (high level), (b) the Parent Supervision Questionnaire (PSQ) to measure parental supervision ("premature autonomy"), (c) the Parent Report of Delinquency (PRD) to measure parental monitoring, (d) the Behavior Rating Inventory of Executive Functioning – Second Edition (BRIEF 2) to measure self-control, and (e) the Hollingshead Four Factor Index of Social Status (HI) to measure SES.

To clarify the relationship between these various dimensions, inferential statistical techniques were used to analyze the results of the surveys and the relationship between continuous variables. Multiple linear regression/correlation (MRC) analyses were used to make predictions about those factors that influenced deviant adolescent behavior.

Research Questions and Hypotheses

Research Question 1: Is there a relationship between parental supervision as defined by high levels of parental involvement (tracking and surveillance) and deviant adolescent behavior as measured by parental reports of behavior of middle and high school students?

$H_1$1: There is a significant relationship between parental supervision (tracking and surveillance) and deviant adolescent behavior as measured by parental reports of behavior of middle and high school students.

$H_0$1: There is no significant relationship between parental supervision (tracking and surveillance) and deviant adolescent behavior as measured by parental reports of behavior of middle and high school students.

Research Question 2: Is there a relationship between parental supervision as defined by low levels of parental involvement (premature autonomy) and deviant adolescent behavior as measured by parental report of behavior of middle and high school students?

$H_1$2: There is a significant relationship between low levels of parental supervision (premature autonomy) and deviant adolescent behavior as measured by parental report of behavior of middle and high school students.

$H_0$2: There is no significant relationship between low levels of parental supervision (premature autonomy) and deviant adolescent behavior as measured by parental report of behavior of middle and high school students.

Research Question 3: Is there a relationship between parental monitoring as defined by the parent's awareness of the adolescent's daily activities (greater autonomy) and deviant adolescent behavior as measured by parental report of behavior of middle and high school students?

$H_1$3: There is a significant relationship between parental monitoring (greater autonomy) and deviant adolescent behavior as measured by parental report of behavior of middle and high school students.

$H_0$3: There is no significant relationship between parental monitoring (greater autonomy) and deviant adolescent behavior as measured by parental report of behavior of middle and high school students.

Research Question 4: Does self-control moderate the relationship between parent supervision and deviant adolescent behavior as measured by parental report of behavior of middle and high school students?

$H_1$4: There is a significant relationship between parental supervision, the moderating variable of self-control, and deviant adolescent behaviors as measured by parental report of behavior of middle and high school students.

$H_0$4: There is no significant relationship between parental supervision, the moderating variable of self-control, and deviant adolescent behaviors as measured by parental report of behavior of middle and high school students.

Research Question 5: Does SES moderate the relationship between parent supervision and monitoring and deviant adolescent behavior as measured by parental report of behavior of middle and high school students?

$H_1$5: There is a significant relationship between parental supervision, the moderating variable of SES, and deviant adolescent behaviors as measured by parental report of behavior of middle and high school students.

$H_0$5: There is no significant relationship between parental supervision, the moderating variable of SES, and deviant adolescent behaviors as measured by parental report of behavior of middle and high school students.

Theoretical Foundation

The research questions addressed the relationship between parental supervision and monitoring and deviant adolescent behavior using behavioral principles as applied in social learning theory. Sutherland's differential association theory in 1947 first mentioned the dynamic process that also included both reciprocal and feedback effects to include the principle that behavior can be differentially reinforced by its consequences (as cited in Akers, 1985). From this perspective, as explained by Bandura (1978), psychological functioning involves a continuous reciprocal interaction between behavioral, cognitive, and environmental influences, which is most similar to that of a psychosocial approach. Bandura explained that behavior is learned by direct experience through observation and/or imitation of other people's behavior and the resulting consequences for them.

Social learning theory was later developed as a general theory of crime and deviance by Akers and Burgess (as cited in Akers, 1985). These researchers extended Sutherland's differential association theory as it became more formalized and known as the differential association-reinforcement theory (Akers, 1985). This theory involves four major explanatory concepts or dimensions, including differential associations, definitions, and the learning mechanisms of imitation and differential reinforcement. According to Akers (1985), differential association-reinforcement with conforming and/or nonconforming significant others typically precedes one's behavior. This theory suggests that one's association, reinforcement, modeling, and exposure to definitions about the conforming and/or nonconforming behavior occur prior to the onset of any acts of delinquency or law violation. This theory is explained in more detail in the research literature presented in Chapter 2.

As the family is considered the primary group in this differential association-reinforcement process, parental reports of supervision and monitoring and deviant behaviors were assessed in this research study. Parental reports of the moderating self-control and SES were also assessed using surveys and objective measures in order to clarify the relationship between parental supervision and monitoring and deviant adolescent behavior in middle school (ages 11-13) and high school (ages 14-18) students.

Conceptual Framework for the Study

Adolescence is a critical stage of human development "characterized by more biological, psychological, and social changes than any other stage of life except infancy"

(Holmbeck et al., 2000, p. 335). The psychosocial changes that occur during adolescence make this developmental period one in which intervention can have especially lasting impact. As a result, attention to these psychological and social dimensions via psychosocial models of adolescent development have been suggested (Holmbeck et al., 2000; Steinberg & Morris, 2001). Thus, a psychosocial framework was employed in this research on parental supervision and monitoring on the development of deviance in adolescent middle and high school students. In Chapter 2, I use this psychosocial framework in conjunction with social learning theory to show the continuous reciprocal interaction between the psychological and environmental influences, as a result of this study.

Nature of the Study

In this study, I explored the potential relationship between parental supervision and monitoring and deviant adolescent behavior as well as investigated whether the relationship is moderated by certain psychosocial factors, including self-control and SES. This quantitative study was nonexperimental in nature, specifically using a cross-sectional, survey research design in that the data collected for this study were not directly manipulated. The independent variables included parent reports of (a) parental supervision, which are either the more controlling forms of tracking and surveillance; (b) the less controlling form of supervision known as "premature autonomy"; and/or (c) parental monitoring, which is an awareness of an adolescent's daily activities that allows for greater autonomy. The dependent variable included deviant adolescent behaviors as

measured by parental report of any behavior that may result in disciplinary action. The moderating variables used in this study were self-control (Crosswhite & Kerpelman, 2009) and SES (Barrett & Katsiyannis, 2015; Dodge & Petit, 2003). To clarify the relationship between these various dimensions, inferential statistical techniques were used to analyze the results of various surveys, including the PSQ, the SQPC, the BRIEF 2, the PRD, and the HI and the relationship between these continuous variables. MRC analyses were used to make predictions about those factors that influence deviant adolescent behavior.

A sample of 84 parents of middle school students (ages 11 – 13) and high school students (ages 14 – 18) were required to participate in this study. These are the parents of students who have reportedly engaged in any behavior that may have resulted in disciplinary action, whether at home, school, or in the community. MRC analyses were used to explore relationships between parental supervision, premature autonomy, parental monitoring, the moderating psychosocial factors (self-control and SES), and deviant adolescent behavior. The data were analyzed using the most recent version of the SPSS.

Definitions

Deviant adolescent behavior: Any behavior that results in disciplinary action whether at home, school, or in the community. Deviant school behaviors as defined by the Maryland Guidelines for a State Code of Discipline (MSDE, 2014) for school disciplinary action (e.g., suspension, alternative placement, and/or expulsion) and include such behaviors as poor school conduct, inappropriate sexual behavior in school (e.g.,

sexual assault, harassment), bullying and harassment (e.g., persistent bullying, cyberbullying), threats (e.g., bomb threats or threatening a school shooting), destruction of school property, substance use or possession (e.g., alcohol, inhalants, drugs/controlled substances), violence (e.g., preplanned fighting or any act resulting in serious bodily injury), and possession of explosives or firearms (Coles et al., 2002; Crosswhite & Kerpelman, 2009; Dishion et al., 2004; Monahan et al., 2014; Puzzanchera, 2008; MSDE, 2014).

Parental monitoring: Parenting practices and family relationships that promote autonomy, closeness, and connectedness (Fosco, Stormshak, Dishion, & Winter, 2012). A parent's awareness of an adolescent's daily activities (Copeland-Linder et al., 2011).

Parental supervision: High levels of parental involvement with more controlling forms of tracking and surveillance, which can lead to poor adjustment in adolescents (Keijsers et al., 2012; Stattin & Kerr, 2000). Low levels of parental involvement that occur during puberty when many parents tend to relinquish support and monitoring of their adolescents at around ages 13 – 14, referred to as "premature autonomy" (Dishion et al., 2004, p. 516), which may also lead to poor adjustment in adolescents.

Premature autonomy: Occurs during puberty (ages 13-14), when parents tend to relinquish support and monitoring and adolescents tend to pull away from parental support and monitoring. Often, adolescents begin to become more involved in social activities with peers. In some cases, these peers participate in deviant activities.

Psychosocial factors: The dynamic and continuous process of the reciprocal interaction and feedback effects between such factors as parental supervision and monitoring, self-control, socioeconomic status, and deviant adolescent behaviors.

Social learning theory: Akers (1985) suggested that one's differential association, reinforcement, modeling, and exposure to definitions about the conforming and/or nonconforming behavior occur prior to the onset of any acts of delinquency or law violation. This theory also suggests that families are the primary group in this process and that deviant tendencies have already developed based on the functions of previously learned patterns of behavior within the family.

Assumptions and Limitations

The survey questions were administered online with the parents as the respondents. Participant responses were kept confidential. One assumption was that the topic of parental supervision and monitoring and deviant adolescent behavior is considered a personal issue and could be difficult to discuss. In this study, the results of the surveys and questionnaires were based upon the accuracy and the ability to truthfully report these intimate family details. Another assumption of this study was that participants would answer honestly to survey questions.

Parental reports of supervision and monitoring, child self-control, family SES factors, and deviant adolescent behaviors were assessed in this study using surveys and other objective measures of psychosocial functioning. Social learning theory (Akers, 1985) suggests that differential association with conforming and/or nonconforming

significant others typically precedes one's behavior. It suggests that families are the primary group in this differential association process. It is assumed by this theory that one has already developed deviant tendencies based on the functions of previously learned patterns of behavior within the family that makes them more attracted by and/or attractive to other deviant associations (e.g., friendships, circumstances, and preferences). Another assumption of this study was that the moderating variable of self-control was based on previously learned patterns of behavior within the family and was an important psychosocial factor in this study.

Further, the behavioral principles as applied in social learning theory suggest that psychosocial functioning involves a continuous reciprocal interaction between the behavioral, cognitive, and environmental influences. Social learning theory is a dynamic process that involves both reciprocal and feedback effects to include the principle that behavior can also be differentially reinforced by its consequences as well as models in one's social environment (Akers, 1985). A psychosocial model used in conjunction with social learning theory showed the continuous reciprocal interaction between the psychological and environmental influences to better understand the results of this study. Parent reports of supervision, monitoring, self-control, SES and deviant adolescent behaviors were the psychosocial factors in this survey research.

Limitations included that the parent participants may not be truthful and may present their parenting behavior in a more positive light than they exhibit. An additional limitation included the parent's actual knowledge of the adolescent's secretive behaviors.

Another limitation was that the parents may have been defensive and found it hard to exhibit trust and receptiveness, particularly if any consequences were imposed upon their child. An additional limitation was that the parents could have responded negatively to survey questions given the circumstances of their participation. These are the parents of students who have reportedly engaged in any behavior that may result in disciplinary action.

Another limitation of the study was its generalizability to other school districts in other states. While federally mandated, student codes of conduct are governed by each state, such as the MSDE (2014). Each county (local education agency) within the state is also allowed to adopt a set of rules and regulations to maintain order and discipline necessary for effective learning to take place. Reasonable measures were taken to ensure that the survey sample included students within the state of Maryland, specifically within the local Prince George's County Public Schools, in order to address the study's generalizability. Further, objective measures were used (e.g., BRIEF 2), which contain validity checks to report methodological weaknesses inherent in the study.

Significance

In this study, I aimed to explore the relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by certain psychosocial factors (self-control and SES) in middle and high school students. This research was important because of the costs to society due to early deviant behaviors. A psychosocial

model and social learning theory (Akers, 1985) were used to understand this study's findings.

This topic was chosen in order to further explain the interplay between the parenting and deviance in adolescence. According to the research literature, characteristics of the family, such as parental knowledge and child disclosure (Salari & Thorell, 2015), family aggression (Benson & Buehler, 2012), low parental education and younger parental age (Racz & McMahon, 2011), parental monitoring (Copeland-Linder et al., 2011), and low parental SES and poor parenting skills (Crosswhite & Kerpelman, 2009) were all associated with the parental influence of deviance in adolescents. However, very little was known about the possible moderating variables that affected parental supervision and monitoring and its influence on deviance.

Crosswhite and Kerpelman (2009) noted that constructs associated with social learning theory (e.g., coercion process) have not been adequately considered and should be explored in future research. The extant research does not adequately address these complex underlying processes that occur and influence adolescent development. Two potential moderating psychosocial factors, self-control and SES, which were believed to help explain the association between parental supervision and monitoring and deviant adolescent behavior, were explored in this study. An understanding of the parental influences of the etiology of deviant adolescent behavior may contribute to the development of theories on both normal and atypical adolescent development.

While there have been numerous studies on deviance in adolescence, the implications of these studies on prevention, policy, and practice decisions remain unclear.

Individuals, schools, society, and family in general will likely benefit from potential prevention and intervention efforts gained from this survey research, particularly as they are provided in an integrated and coherent manner. Comprehensive, multimodal programs that are designed to address multiple behaviors and that involve individuals, families, and communities are needed (Eddy, Barkan, & Lanham, 2015). At the individual level, this study has the potential for contributing to the body of knowledge as links between the psychosocial capacities of the individual that are still developing during adolescence and deviance were drawn. At the level of the school, prevention programs should be designed to address the psychological and social issues of each developmental period. An awareness of these psychosocial factors may be helpful to middle and high school teachers as they plan appropriate academic instruction for students, particularly for the developing adolescent. Further, these programs should train teachers to recognize the impact of trauma and traumatic stress on youth risk taking behaviors. Effective programs must also increase student involvement with other social systems, including family, schools, and the community.

At the family level, such programs should teach effective parenting skills such as positive reinforcement of appropriate behavior. Such programs should also strengthen family, school, and community ties by providing students and parents with opportunities for community service and involvement. Prevention programs can potentially reduce

unhealthy, antisocial, and problem behaviors and increase healthy, positive, prosocial behaviors, while improving mental health and academic achievement. Uncovering the underlying processes that contribute to deviant adolescent behaviors has the potential for positive social change in that it can provide important contributions to public policy, to future prevention research, and for individual, school, and family treatment interventions.

Summary

Adolescence is a critical stage of human development "characterized by more complex psychological and social changes than any other stage of life except infancy" (Holmbeck et al., 2000, p. 355). Attention to these psychological and social dimensions via psychosocial models of adolescent development have been suggested (Black & Hoeft, 2015; Melchert, 2015; Sameroff, 2010). However, these models still have difficulty explaining complex, learned behaviors. Social learning theory (Akers, 1985) provided a basis for further understanding the complex nature of learned behaviors, such as the reciprocal and feedback effects as well as the principle that behavior can be differentially reinforced by its consequences. A psychosocial model and social learning theory were used in conjunction to better understand the results of this study.

In this study, I aimed to explore the relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by certain psychosocial factors including self-control and SES in middle and high school students. Uncovering the underlying processes that contribute to deviant adolescent behaviors has the potential

for positive social change in that it provides important contributions to future prevention research and to family, school, and individual treatment interventions.

In Chapter 1, the background, problem statement, purpose of the study, research questions and hypothesis, theoretical foundation, conceptual framework, nature of the study, definitions, assumptions and limitations, and the significance of the study were explored. Chapter 2 is a review of the current literature that establishes the relevance of the study. I discuss the literature search strategy, the conceptual framework used to ground the study, and a more comprehensive review of the current literature. In Chapter 3, I identify the research design and the rationale for the study, the research methodology, threats to the validity of the study, and the ethical procedures and any concerns or issues as applicable. In Chapter 4, I explain the data collection process, report baseline descriptive and demographic characteristics of the study's sample, report descriptive statistics that appropriately characterize the sample, evaluate statistical assumptions appropriate to the study, and report statistical analysis findings as organized by the research questions and hypotheses. In Chapter 5, I offer an interpretation of the findings, describe how the findings confirm, disconfirm, or extend knowledge in the discipline of psychology, and analyze and interpret the findings in the context of the theoretical and conceptual framework offered. Finally, recommendations for further research and the potential impact for positive social change at the individual, family, and community level are offered.

Chapter 2: Literature Review

Introduction

In this study, I aimed to explore the relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by certain psychological and social factors in middle and high school students. There were significant gaps in the literature that failed to explain the interplay between the various psychosocial factors and deviance in adolescence. Most of the research on adolescent behavior was largely based on data from treatment interventions (Dishion, Nelson, & Kavanagh, 2003). There was also considerable research on child development outcomes based on very broad levels of analysis using such global constructs as attachment and warmth (Calkins, 2011). However, these broad levels of analyses often did not address the complex psychosocial processes that occur during adolescent development.

There is growing attention to the psychological and social dimensions of adolescent development. A review of the literature on adolescent mental health revealed significant gaps in the research on deviant adolescent conditions and behaviors. Crosswhite and Kerpelman (2009) noted that while a number of factors may influence deviance in adolescents, parental influence had a particularly strong influence. Copeland-Linder et al. (2011) studied the effects of risk and resilience factors and called for more research on parental monitoring in reducing health risk behaviors. While there has been considerable research on parenting and developmental outcomes, much of the research has been at a broad level of behavioral analysis. There was a need for models of

parenting and child behavior that offer more specificity regarding the processes that underlie these relationships.

Organization of the Chapter

In Chapter 2, I review the current literature that establishes the relevance of the study. The literature search strategy, the conceptual framework used to ground the study, and a more comprehensive review of the current literature are discussed in depth. This review addresses the various hypotheses, including the effects of parental supervision and monitoring and the interplay of certain psychosocial factors that also contribute to deviance in adolescence. I also explore the current research that supports and opposes the hypotheses, discuss related adolescent outcomes, and suggest gaps within the specific topic throughout the review. I offer a conceptual model that explores various mechanisms that are associated with and potentially moderate parental influence on deviant behaviors is conceptualized.

Literature Search Strategy

Extensive searches were conducted using the following EBSCO psychology databases: Academic Search Complete, ERIC, Medline, PsycARTICLES, PsycBOOKS, PsycCRITIQUES, PsycInfo, and SocINDEX with Full Text. This search of scholarly texts published since 2009 using keywords *parental supervision, parental monitoring, deviance, deviant adolescent behavior,* and *externalizing behavior* yielded only 137 relevant articles. Google Scholar was employed, specifying a search for relevant articles since 2009, which accessed 1,100 related articles. A Thoreau Multi-Database Search was

also employed, specifying a search of peer-reviewed literature since 2009, using the keywords *parental supervision, parental monitoring, deviant adolescent, externalizing behaviors,* and *biopsychosocial,* which yielded seven relevant articles. Peer-reviewed journals were selected using the keywords *parental supervision and monitoring, parenting, deviant adolescent, psychosocial,* and *externalizing behaviors*. Other related key terms were *juvenile delinquents, deviance,* and *antisocial behavior*.

Theoretical Framework

Social learning theory is the theoretical foundation used in this research study. As explained by Bandura (1978), a person is neither shaped solely by inner forces nor is one shaped by external control. Rather, Bandura suggested that one's psychological functioning is based on a continuous, reciprocal interaction between one's behavior and environmental influences. Bandura expounded that behavior is learned by direct experience through observation and/or imitation of other people's behavior and the resulting consequences for them.

Sutherland's differential association theory initially suggested that social learning is a dynamic process that includes both reciprocal and feedback effects. His original theory proposed that nonconforming behaviors are learned by the same process and involved the same mechanisms as conforming behaviors (as cited in Akers, 1985). Social learning theory was later developed as a general theory of crime and deviance by Akers in 1973 who in collaboration with Burgess in 1965 developed the differential association – reinforcement theory (Akers, 1985). Akers and Burgess modified the original

differential association theory to seven statements of the principles of modern learning theory as developed by behaviorists, particularly the principle that behavior can be differentially reinforced by its consequences (Akers, 1985). The differential association theory evolved as a paradigm and became more formalized as social learning theory (Akers, 1985). Social learning theory involves four major explanatory concepts or dimensions of the theory, including differential associations, definitions, and the learning mechanisms of imitation and differential reinforcement.

Social learning theory (Akers, 1985) suggests that differential association with conforming and/or nonconforming significant others typically precedes one's behavior. Further, social learning theory suggests that one's association, reinforcement, modeling, and exposure to definitions about the conforming and/or nonconforming behavior occur prior to the onset of any acts of delinquency or law violation. It further suggests that families are the primary group in this differential association process. The concept of differential association may also involve interaction and/or exposure to other secondary reference groups, as well as social media, the internet, and computers games. It is assumed by this theory that one has already developed deviant tendencies based on the functions of previously learned patterns of behavior within the family that makes them more attracted by and/or attractive to other deviant associations (e.g., friendships, circumstances, and preferences). This theory suggests that after such deviant patterns, associations, and the reinforcing or punishing consequences of the behavior have been established, continued or new associations will be made. It proposes that this sequence of

events precedes the onset of deviant behavior and will continue until more rewarding alternatives or tendencies have been formed. This theory maintains that deviant patterns of behavior will persist (or desist) depending on the continuity (or discontinuity) of the person's patterns of associations, definitions, and reinforcement.

Dishion, Owens, and Bullock (2004) studied the effects of two competing models of social mechanisms linking father and son deviance in two-parent families: the cultural deviance and disrupted family models. Their research involved multiple measurements included assessments of family management, father antisocial behavior and son's antisocial behaviors, observations, review of records, and self-reports of delinquency and substance use. Structured equation modeling was used to test the competing models for father's influence on son's antisocial behaviors. Early parenting practices were correlated with father and son antisocial behaviors but were not predictive of later association with deviant peers. These researchers noted that they were unable to identify the specific social mechanisms linking father and son deviance to identification or modeling processes (Dishion, Owens, & Bullock, 2004).

Akers (1998) noted that social learning theory does not confine itself to a cultural deviance theory and the explanation of deviance as a culture that values delinquency. Akers (1985) noted that Sutherland's differential association was important since the beginning of social learning theory and remains so today. Social learning theory proposes and the research shows that individual differences in behavior can be best explained by past and current exposure to both conforming and nonconforming patterns and values as

well as to processes of differential associations, definitions, imitation, and differential reinforcement (Akers, 1985).

Akers (2009) has since maintained that social learning theory is still evolving. Akers elaborated on and provided empirical support of the theory of social structure and social learning (SSSL) that ties epidemiology and group differences in crime to individual conduct. The SSSL model identifies several major dimensions of social structures (conditions, contexts, or variables) related to crime and deviance and proposes that social learning is the principle process by which these social structures affect conforming and/or nonconforming behavior. This new model proposes to extend the principles of social learning theory to the global, most macro level of theory as it explains variations of crime across societies.

Orcutt and Schwabe (2013) conducted a longitudinal application of the SSSL model in their study of gender, race/ethnicity, and deviant drinking behavior. They found no support for the SSSL model mediation hypothesis that the social learning variables account for deviant drinking by gender and race/ethnicity using multivariate analyses (Orcutt & Schwabe, 2013). However, they found interactional effects of the SSSL generality hypothesis, that the social learning variables on deviant drinking are similar across gender and race/ethnic groups (Orcutt & Schwabe, 2013). Finally, some support for the SSSL comparative hypothesis was found in that the social learning variables were better than the social bonding variables at predicting underage and heavy alcohol drinking (Orcutt & Schwabe, 2013).

Social learning theory was used as the basis for this study as there was a large body of research evidence that showed that social learning concepts such as differential association, modeling, definitions, and reinforcement, particularly involving family and peers, account for individual differences in deviant adolescent behavior (see Akers, 2009). Quantitative models involving social learning variables are typically appropriate for measuring social learning theory because the main independent variables and the operational measures are often causally linked to the deviant behavior (Akers & Jensen, 2013). Akers and Jensen (2013) suggested that it is also reasonable to expect that social learning theory will be supported by cross-sectional survey data as well even though the data may not fully reproduce the underlying processes. Multiple regression analyses of sets of variables derived from or consistent with social learning theory were supported by the data. Akers and Jensen maintained that social learning theory is supported when relationships are as predicted; otherwise it is undermined. Likewise, they maintained that the stronger the observed relationships, the more support for the theory, while weak relationships may serve to disconfirm the theory (Akers & Jensen, 2013). The identification of the underlying processes that contribute to deviant adolescent behavior may help change the trajectory of such learned behavior and bring about significant social change.

Conceptual Framework

Adolescence is a critical stage of human development "characterized by more biological, psychological, and social changes than any other stage of life except infancy"

(Holmbeck et al., 2000, p. 335). Despite the recent interest in the biological explanations for human behavior, this research is still in its infancy and more time is needed to learn more about these factors. The psychosocial changes that occur during adolescence make this developmental period one in which intervention can have especially lasting impact. As a result, attention to the psychological and social dimensions via psychosocial models of adolescent development have been suggested (Black & Hoeft, 2015; Melchert, 2015). Therefore, in this study, I was primarily concerned with the psychosocial elements. I aimed to explore the relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by certain psychological and social factors in middle and high school students.

Over the past 2 decades, there have been several theories used to explain the development of human behavior in general and the development of deviant adolescent behavior in particular. Several leading psychosocial theories including the theory of ecology of human development (Brofenbrenner & Ceci, 1994; Brofenbrenner, 1979), social learning theories (Bandura, 1969, 1978, 1984, 2007), and social control theory (Hirschi, 1969, 1977, 2000) have been used to explain deviance in adolescence. These models help to explain how certain social and environmental factors contribute to an adolescent's decision to participate in deviant behavior.

The Ecological Systems Theory

The most influential of all of the psychosocial theories is Brofenbrenner's (1979) ecological theory. It has been widely used to explain a psychosocial perspective of human

development as it emphasizes the role of the environment and the various ecological systems in which the adolescent develops. Brofenbrenner considered the various environmental systems that influence human development. He posited that human development occurs within an ecological system that includes several subsystems: (a) the microsystem (e.g., family, school, community), (b) the mesosystem (relations between microsystems), (c) the exosystems (relations within settings in which one does not have an active role), (d) the macrosystems (e.g., one's culture), and (e) the chronosystem (the historical context in which one lives). In his latter formulation of the ecological theory, he suggested that systems combine in "non-additive, synergistic fashion" and suggested the importance of research that assesses for such "joint synergistic effects" (Brofenbrenner & Ceci, 1994).

A Psychosocial Model of Adolescent Development

Adolescence is a developmental stage marked by the influence of certain moderating psychological (e.g. self-control) and social changes (e.g., increased peer interactions and an awareness of SES). It is an important time developmentally as adolescents experience new stresses, including increased autonomy and peer influences (Trudeau, Mason, Randal, Spoth, & Ralson, 2012). It is also a time for the beginning of certain developmental outcomes for adolescents, including achievement, autonomy, identity, intimacy, psychosocial adjustment, sexuality, responsibility, and for accepting consequences for one's own actions. If these developmental outcomes are not achieved

successfully, the adolescent may experience developmental crises, which can cause maladjusted functioning such as deviant adolescent behavior (Erikson, 1963).

Sameroff (2010) suggested that a future challenge would be to use a broad framework to create a developmental model of the psychological and social factors that interact to explain both adaptive and maladaptive functioning across the lifespan. A psychosocial model was considered herein as it important to understand the reciprocal interaction between the psychological and social factors that contribute to both normal and atypical adolescent development.

A psychosocial model of deviant adolescent behavior is shown in Figure 1. It is a bidirectional framework for understanding adolescent maladjustment during this critical developmental period. This psychosocial model shows a bidirectional view of parent-child relations. Specifically, it is an attempt to consider whether or not child-rearing characteristics (e.g., parental supervision and parental monitoring) influences or are influenced by delinquency and/or by other moderating problem behaviors of the child (e.g., self-control) and/or other social factors (e.g., SES). The failure to take into-account certain “child effects” causes an overemphasis of the effects of parenting on delinquency (Gault-Sherman, 2012, p. 122). This model is featured here because it demonstrates that intraindividual psychological and social factors potentially moderate the effects of parental supervision and monitoring on deviant adolescent behavior.

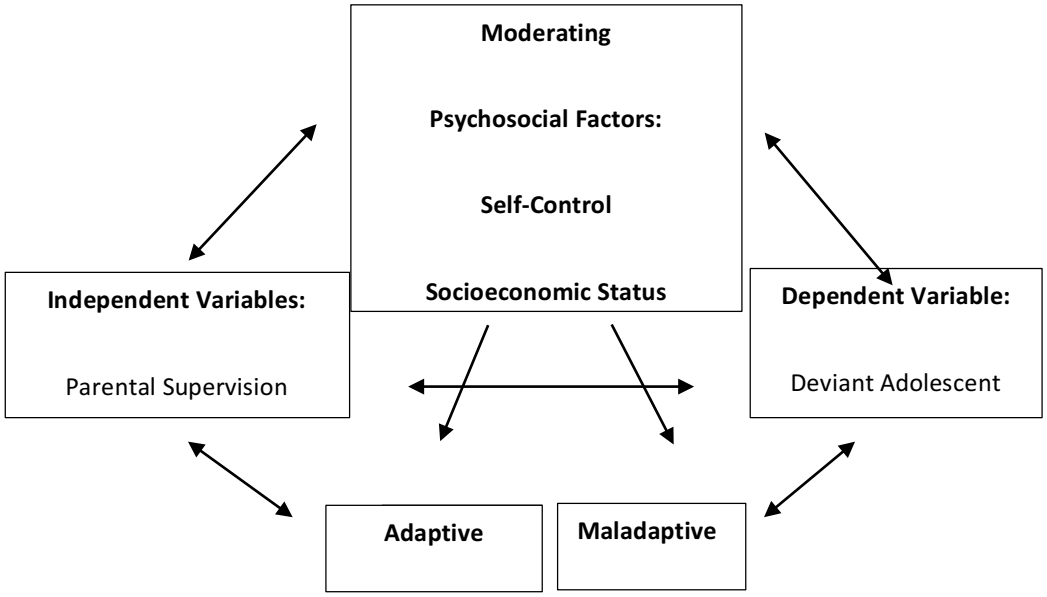

Figure 1. A psychosocial model for understanding deviant adolescent behavior.

Similarly, the behavioral principles as applied in social learning theory, which suggest that psychosocial functioning also involves a continuous reciprocal interaction between the behavioral, cognitive, and environmental influences, were also considered in this study. Social learning theory is a dynamic process that includes both reciprocal and feedback effects and also includes the principle that behavior can be differentially reinforced by its consequences (Akers, 1985). This theory suggests that families are the primary group in this process and that deviant tendencies have already developed based on the functions of previously learned patterns of behavior within the family. The current study used a psychosocial model in conjunction with social learning theory to help

explain those underlying factors that moderate the relationship between parental supervision and monitoring and deviant adolescent behavior.

Literature Review Related to Key Variable and/or Concepts

Research on Adolescent Development

Adolescence is the socially designated developmental period between childhood and adulthood, which is generally tied to age and/or grade-based transitions from elementary to middle school and eventually to high school. Williams, Holmbeck, and Greenley (2002) identified two transition points during this developmental period – the transition from early childhood to adolescence and the transition from late adolescence to adulthood. It has also been suggested that a period of emerging adulthood should also be considered a distinct developmental period as it has been recently found that important changes in the brain's structure and function continue to develop well into the early to mid-twenty years of age (Steinberg, 2013). The transitional period of late adolescence to adulthood has been relatively neglected in the literature despite the fact that many health risk behaviors (e.g., smoking, alcohol and drug use, and unsafe sex) tend to peak during this period and independence from parents is often achieved during this period (Hale, Fitzgerald-Yau, & Viner, 2014).

Adolescence is a developmental stage marked by profound cognitive changes (e.g., decision making) and social changes (e.g., family and peer influences). Erikson (1963) noted that adolescence is "a psychosocial stage between childhood and adulthood, and between the morality learned by the child and the ethics to be developed by the

adult" (p. 245). It is also a time for increased autonomy, responsibility, and for accepting consequences for one's own actions, which relies heavily on the developing cognitive ability to make wise choices. Sameroff (2010) noted that depending on the family and other self-regulating systems involved with the adolescent, "desires for autonomy or intimacy can be fostered or thwarted", which can have significant impact on the adolescent's future functioning (p. 19). In this study, the psychosocial factors that influence deviant adolescent behavior were explored.

Research on Deviance in Adolescence

The period of adolescence is often a difficult transitional period with vulnerabilities to certain psychological and environmental influences and has the potential for either adaptive growth or risk for maladaptive outcomes (Calkins, 2011). Snyder (2008) summarized and analyzed national juvenile arrest data and reported that in 2006, 2.2 million juveniles were arrested. Puzzanchera (2009) noted that between 2007 and 2008, while there was a three percent decrease in the numbers of juvenile arrest rates, adolescents continue to engage in deviant behavior. More recent data showed that between 2012 and 2014, violent crimes in students 12-18 years (e.g., rape, sexual assault, robbery, and aggravated assault) were more common than theft crimes in the schools (OJJDP, 2016). Juveniles in crisis pose a challenge to this nation.

Over the years, considerable attention has been paid to the developmental course that leads to deviance in adolescence. Early in the course of this particular developmental trajectory, deviant or anti-social behaviors may be seen as rule-breaking behaviors,

disobedience or defiance, aggression or violence, lying, stealing, and property damage, which have serious health risks for adolescents and impact society as well. Research showed that deviance typically peaks during early adolescence, continues into late adolescence, and may extend into young adulthood (Harris-McKoy & Cui, 2013; Steinberg, 2013). However, Mulvey, Schubert, & Chassin (2010) showed that most adolescents that engage in deviant acts do not necessarily become career criminals.

Light, Rusby, Nies, and Snijders (2014) found that antisocial behaviors increased steadily during 6th grade but decreased by 7th grade for boys and 8th grade for girls. During later adolescence, the convergence of these types of anti-social behaviors, experimentation with substances, and affiliations with deviant peers may all lead to more serious problems (Fosco et al., 2012; Lansford, Dodge, Fontaine, Bates, & Petit, 2014). When left unaddressed, these behaviors may become more severe over time and may lead to other deviant behaviors including substance abuse, risky sexual behaviors, and delinquency (Fosco et al., 2012; Lansford et al., 2014).

Gender differences have also been found in deviant adolescent behavior. Aggression in males and females invite different patterns of response and reflect differences in norms and behaviors (Benson & Buehler, 2012). Male adolescents are more likely to be involved in delinquent activities than females (Puzzanchera, 2009; Salari & Thorell, 2015; Trudeau et al., 2012). Tradeau et al. (2012) reported that during early adolescence, males demonstrate conduct problems at a rate of 4 to 15 times higher than females and during later adolescence 1 to 4 times the female rate. Puzzanchera

(2009) showed that male adolescents were most likely to engage in extreme antisocial behavior (e.g., gang membership) than were female adolescents. However, the author also reported that there has been an increase in the rate of female adolescents who are also involved in delinquent acts (e.g., simple assaults, drug abuse violations, and DUI).

Salari and Thorell (2015) noted that girls disclose more information to their parents, that parents are more knowledgeable about their daughter's lives than their son's lives, girls are less likely than boys to engage in deviant behavior and have less to hide, girls have closer relationships with their parents, or have less freedom. Harris-McKoy and Cui (2013) suggested that more males continue with delinquent behavior over their lifetime than females. They also suggested that the difference in lifetime deviant or antisocial behavior between males and females is associated with differences in parenting. Using a national longitudinal dataset, the results of a regression analysis showed that a lack of parental control had a positive association with delinquency both concurrently and longitudinally into young adulthood. Unexpectedly, they found that parents' college education was positively associated with delinquency in young adulthood and that early parental control is influential both throughout adolescence and into young adulthood. The underlying nature of these differences remain unclear and indicated the importance of clarifying the ways in which parenting influences deviance in adolescence.

Influence of Parenting on Deviance

The research literature suggested associations between parental supervision and monitoring and deviance in adolescence. During adolescence, most youth typically "spend less time with their families, feel less close with them, and receive less supervision and monitoring from their parents" and spend increasingly more time with their peers (Fosco et al., 2012, p. 202; Keijsers et al., 2012). These adolescents may fail to reap the benefits of parental guidance and support and tend to seek the advice of their peers. Youth who are given excessive freedom and unsupervised time, a process known as premature autonomy, are at significant risk of poor outcomes including escalation in substance use, delinquency, violence in adolescence, high risk sexual behavior, and aggression towards a partner (Dishion, Nelson, & Bullock, 2004; Lansford et al., 2014). A study of the long-term correlates of premature autonomy showed an association with an increased developmental risk for higher deviant behavior in later adolescence, lower levels of education in young adulthood, and a lower level of subjective well-being in both late adolescence and young adulthood (Haase, Tomasik, & Sibereisen, 2008). Drawing from two German national surveys, correlates of premature behavioral autonomy were assessed in a final sample size of 397 adolescents (ages 16-21 years) and young adults (ages 25- 30 years). Results showed that premature behavioral autonomy is maladaptive. The research suggested that premature behavioral autonomy leads to a possible chain of events including engagement in deviant behavior, identity struggles, and lower planfulness, which leads to later lower educational attainment and maladjustment in the

work domain. Premature autonomy or the early timing of certain developmental tasks in adolescence may be associated with risks that extend well beyond adolescence into young adulthood. Similarly, the current study explored the association between parental supervision including premature autonomy (low levels), tracking and surveillance (high levels), as well as parental monitoring on deviant adolescent behaviors were also considered (Haase et al., 2008).

Conversely, youth who are supervised too closely and whose parents exercise high levels of supervision and monitoring that involve more controlling forms of tracking and surveillance also tend to have poor adjustment. Stattin and Kerr (2000) also suggested that these more controlling techniques can also lead to poor adjustment in adolescents, including higher levels of depression, low self-esteem, and doubts about one's own abilities to succeed**.** These authors studied 1,186 adolescents who were 14 years old in Sweden and found that parental supervision (e.g., tracking and surveillance methods) was not effective as they were considered controlling by the adolescents. Correlation and multiple regression methods were used to show the relations between adolescent adjustment and monitoring and three sources of parent knowledge. They found that children's spontaneous disclosure of information and parental tracking and surveillance were linked to poorer adolescent adjustment than to parental control and/or parental solicitation of knowledge (Stattin & Kerr, 2000). A more recent replication study that extended the sample to older adolescents and the findings to ADHD also showed that child disclosure was the main source of parent knowledge not only for norm-breaking but

for conduct problems which lead to poor adolescent adjustment as well (Salari & Thorell, 2015). The current study explored this parent deviance association as well and also considered the gap in the literature of the underlying moderating processes that contribute to this association.

A longitudinal study of parental control and prohibition of friendships involving Dutch youth (n=497) utilized a cross-lagged panel analysis and revealed strong links between contact with deviant peers and adolescent delinquency (Keijsers et al., 2012). The findings showed that parental reports of the prohibition of friendships positively predicted contact with deviant peers and predicted higher adolescent delinquency. A measurement limitation of this study was that it was unclear exactly why and how parents communicate this disapproval or try to forbid friendships. Keijsers et al. (2012) called for subsequent studies to clarify the family processes underlying this parenting behavior. However, similar effects were not shown for parental control. Parental control allowed parents to keep track of their adolescent's activities and friendships while allowing for greater autonomy. These results showed marginal effects on adolescent delinquency, which suggests that adolescents may be more active agents in their own socialization process. It was suggested that as adolescents voluntarily disclose or actively conceal information, they play an important role in enabling parent's guidance and support (Keijsers et al., 2012). Further, interpretation of the monitoring literature suggests that parents adjust their levels of control when their adolescent becomes delinquent or begins to associate with deviant peers, this bidirectional perspective of the parenting-deviance

link was not substantiated by these findings (Salari & Thorell, 2015; Stattin & Kerr, 2000). The authors called for more in-depth interviews in order to provide insight into the possible mechanisms that may underlie these effects (Salari & Thorell, 2015).

Children have better outcomes when parenting practices and family relationships promote autonomy, closeness, and connectedness. Fosco et al. (2012) noted that parenting practices are critical in reducing problem behaviors in youth. These researchers defined the process of positive parental monitoring as "parents who stay informed about the children's activities, attend to their children's behaviors, and structure their children's environment. Thomas and Joseph (2013) reviewed the existing literature in a conceptual paper in order to promote positive child and adolescent development in youth in India, which reportedly has the largest adolescent population in the world. Based on their review, they identified five focal areas of family interventions for promoting positive adolescent development including the parent adolescent relationship, family activities, adolescent participation, positive parenting practices, and positive marital relationship. They defined positive parental monitoring, which includes the use of an authoritative parenting style as characterized by parental acceptance and responsiveness and results in positive behaviors in adolescents including self-esteem and social competence. On the other hand, poor parental monitoring, as characterized by parental demandingness or behavioral control, was linked to negative outcomes in adolescents including anti-social behavior, substance use, and sexual risk-taking (Thomas & Joseph (2013). The current research study focused on the influence of both parental supervision as well as parental

monitoring on deviant adolescent outcomes in order to fill the gap between positive adolescent development and prevention of problems.

The influence of parenting on deviant adolescent behavior has been studied for decades and linked with such global constructs as early attachment relationships. Crosswhite and Kerpelman (2009) reported that while many theories (e.g., coercion theory) have been offered to explain an association between parenting and deviance, these do not suggest any potential underlying mechanisms that explain the association between parenting and deviance in adolescence. Their research suggested that the parenting influence may not be directly associated with deviance; rather, it is mediated through psychological factors such as self-regulation and social information processing (Crosswhite & Kerpelman, 2009). They suggested that parenting and mediating factors should be considered from multiple theories in order to fully understand the complex parenting-deviance association. The current research explored the gap between the moderating psychosocial factors of self-control and SES that underlie the parent deviance association.

De Haan, Prinzie, and Dekovic (2010) used a cohort sequential design to examine other moderating psychological factors (over-reactive parenting) between childhood personality characteristics and aggression/delinquency during the developmental period of childhood and adolescence (ages 6 – 15 years). They noted that externalizing behaviors are the most common form of maladjustment in childhood, often persist through adolescence, and are related to adjustment problems in adulthood. These authors

found that the assessment of child personality for such characteristics as externalizing behaviors during early adolescence may be an important tool for identifying children at risk for delinquency and susceptibility to dysfunctional parenting.

Further, these researchers also found that over-reactive (criticism, yelling) dysfunctional parenting, which is similar to coercive parenting, is related to higher levels of externalizing behaviors in children up to nine years of age, and serves as a moderating factor between childhood personality characteristics and aggression/delinquency in children and adolescents (De Haan et al., 2010). They concluded that these over-reactive parents were in need of prevention support in developing and maintaining effective discipline practices in order to reduce aggression and delinquency in adolescence. Their model of child personality characteristics, parenting, and the interaction between them was successful in predicting the development of deviant behavior in children and adolescents (DeHaan et al., 2010).

In addition to the research on these moderating psychological factors, there were several sociocultural factors that also helped to explain deviant adolescent behaviors. There have been few attempts to consider the role of maternal employment in the delinquency literature, which has been linked to distress. Maternal distress was found to be an important moderating social factor that helped to explain deviant adolescent behavior. According to DeCoster (2012), early research posited that working mothers had less time to control their children through supervision and emotional attachments than

homemakers. Therefore, it was believed that youth whose mothers were working were more likely to be delinquent than those of homemakers.

DeCoster (2012) studied both types of parenting practices and found a link to maternal distress which influences delinquency in children and adolescents. As one factor of maternal distress is a loss of energy, DeCoster (2012) explained that often these parents opt out of the formation of emotional attachments in that they require time, energy, and patience on the part of the mother. She noted that maternal distress affects the emotional attachment between mothers and children and encourages the parental use of power-assertive discipline and low levels of supervision, which in turn leads to delinquency.

Using the National Survey of Children and covariance structural analysis, DeCoster's (2012) model of maternal roles and delinquency considered both employed mothers and homemakers as heterogeneous groups. Her model differentiated both groups of women based on their ideology of whether they accept traditional definitions of women's roles. This study concluded that incongruity between the mother's role and ideology increased the likelihood of delinquency due to maternal distress; whereas, congruity between roles and ideologies decreased the likelihood of delinquency in adolescents. The current research study identified related psychosocial influences as SES as an important moderating variable between parenting and deviant adolescent behavior.

Most of the criminological research on parenting and delinquency showed the unidirectional effects of parenting on delinquency. Very little research has been

conducted which showed the effects of adolescent delinquency on parenting. Gault-Sherman (2012) studied the bidirectional effects of both parenting behavior on youth and of adolescent delinquency on parenting. It was hypothesized that parenting affects delinquency and that delinquency affects parenting. Using a cross-lagged regression analysis of the data from the Add Health national longitudinal study, this author found bidirectional effects between parental attachment and each of three types of delinquency: overall, property, and violence delinquency. The findings showed evidence of the reciprocal nature of parenting and delinquency consistent with other transactional and interactional models of parent-child relationships. Specifically, this research showed that low parental attachment influences increased risk of delinquency and that delinquency reduces parental attachment. However, there were no significant bidirectional effects for parental monitoring or for parental involvement and delinquency. His study provided evidence of "child effects" that also suggested an influence on the parent child relationship. It was also noted that most criminological research that considers bidirectionality does so by controlling for such "child effects" as self-control (Gault-Sherman, 2012, p. 122). Failure to take into-account these "child effects" causes an overemphasis of the effects of parenting on delinquency. The current research explored the association of parental supervision and monitoring and deviant adolescent behavior as moderated by certain psychosocial factors as self-control and SES.

Several meta-analyses on the association between parenting and delinquency showed that risk factors for delinquency include family factors (e.g., parenting styles) as

the best predictor when compared to SES, intellectual functioning, and personal distress (Cottle, Lee, & Helbrun, 2001; Hoeve et al., 2009; Hubbard & Pratt, 2002). Hoeve et al. (2009) conducted a meta-analysis on 161 published and unpublished studies of the association between parenting and delinquency. Their research suggested that there is a gap in the literature and future studies are needed on the bidirectional view of parent-child relations, specifically, whether or not child-rearing characteristics are influenced by delinquency or other problem behaviors of the child.

Rekker, Pardini, Keijsers, Branje, and Loeber (2015) also found that within-individual changes in family SES was also associated with a boy's delinquent behavior from childhood through adolescence. In a sample of 503 boys ages 7 – 18 and their caregivers over a ten-year period, fixed effect models showed that youth were more likely to offend when their family SES was lower than when the family SES was higher. These findings suggested that such family factors as parental supervision and monitoring, and other moderating factors as self-control and SES may have a direct effect on adolescent delinquency. Depending on the family and the other factors involved with the adolescent, "desires for autonomy or intimacy can be fostered or thwarted", which can also have significant impact on the adolescent's future functioning (Sameroff, 2010, p. 19). Studies of these types of psychosocial factors and those that potentially moderate the effects of parental supervision and monitoring on deviant adolescent behavior were explored in this literature review.

Influence of Psychosocial Factors on Deviant Behavior

Social Learning Theory

Social learning theory (Akers, 1985) suggests that the differential association with conforming and/or nonconforming significant others typically precedes one's behavior. It further suggests that families are the primary group in this differential association process. The concept of differential association may also involve interaction and/or exposure to other secondary reference groups, as well as social media, the internet, and computers games. Further, social learning theory suggests that one's association, reinforcement, modeling, and exposure to definitions about the conforming and/or nonconforming behavior occur prior to the onset of any acts of delinquency or law violation. It is assumed by this theory that one has already developed deviant tendencies based on the functions of previously learned patterns of behavior within the family that makes them more attracted by and/or attractive to other deviant associations (e.g., friendships, circumstances, and preferences). This theory suggests that after such deviant patterns, associations, and the reinforcing or punishing consequences of the behavior have been established, continued or new associations will be made. It proposes that this sequence of events precedes the onset of deviant behavior and will continue until more rewarding alternatives or tendencies have been formed. Social learning theory maintains that deviant patterns of behavior will persist (or desist) depending on the continuity (or discontinuity) of the person's patterns of associations, definitions, and reinforcement.

Psychological Factors

Certain psychological, and social factors interact in the development of behavior. Crosswhite and Kerpelman (2009) offered conceptual evidence of certain psychological factors that may moderate parental influence and underlie deviance in adolescence. These authors also explored self-regulation and cognitive skills as "potential mediating mechanisms that may help to explain the parenting-deviance association" (Crosswhite & Kerpelman, 2009, p. 613). Using three theories, the coercion theory (CT), the general theory of crime (GTC), and social information processing theory (SIP), they provide an integrative perspective on how parents may influence an adolescent's engagement in deviant behavior and a better understanding of the etiology of adolescent deviance. They also offer evidence of the limited research that indicates that self-control partially mediates the relationship between ineffective parenting and adolescent deviance. While prior criminological research has shown that there is a unidirectional association between parenting and adolescent deviance, there are intra-personal variables or potential moderating factors that may better explain a bidirectional association between parenting and adolescent deviance (Crosswhite & Kerpelman, 2009).

Self-Control

Gardner, Dishion, and Connell (2008) defined the concept of self-regulation as an "individual difference dimension that includes goal setting, planning, task persistence, and environmental management as well as modulation of behavioral, emotional, and attentional reactivity" (p. 274). These authors note that self-regulation develops over time

through a transactional process along with individual differences in reactivity and regulation, maturation of executive functioning, and socialization through educational and social experiences in peer, family, and school contexts.

Crosswhite and Kerpelman (2009) suggested that self-regulation could be a potential mediating mechanism to the parent deviant association. These authors suggested that self-regulation as defined by CT is similar to that of self-control as defined by GTC. They explained that coercion theory (CT) states that an aversive event leads to the reinforcement of a negative behavior and involves a series of feedback loops that escalates over time (Dishion & Patterson, 1997). Crosswhite and Kerpelman (2009) offered two key points about CT. First, some level of coercion exists in every family; however, those children that engage in high levels of coercion tend to do so within and outside of the family context. Second, younger children under the age of 12 years tend to engage in more overt coercive behaviors (e.g., whining, crying, and tantrums). However, by adolescence, those overt behaviors become more covert and involve more serious (e.g., theft, vandalism, alcohol and drug use) deviant behavior. Therefore, according to CT, the path to adolescent deviance can start on one or two paths, early or late onset.

Central to CT is the notion of the coercion process that demonstrates how parenting is influential to the development of deviance. CT outlines five parenting practices that protect against the coercion process and deviant behaviors including: effective discipline, monitoring, problem solving practices, positive parenting, and positive reinforcement. Crosswhite and Kerpelman, (2009) identified several key points

about coercion theory including: a) there are varying levels of coercion within families that influence when an individual begins (e.g., early or late starters) and how long they engage in deviant behaviors; b) that coercion process is bidirectional and escalates overtime; and that c) the coercion process is influential in the development of deviant behaviors such as assaultive, aversive, robbery, rape, and externalizing behaviors. Further, they also noted that four of the five parenting practices were negatively associated with deviance; while parental involvement (e.g., positive parenting) was not associated with deviance at all. They suggested a link between ineffective monitoring and discipline that leads to deviant behavior (e.g., argues, lies, physical fighting, vandalism, and substance abuse) and coercion within the family (Crosswhite & Kerpelman, 2009). These authors also suggested that coercion theory is based solely on the direct, observable influences ineffective parenting has on deviance. Still, coercion theory alone does not explain those moderating mechanisms that underlie deviance in individual adolescents.

The general theory of crime (GTC) suggests that engagement in deviant behavior can be explained by: a) low levels of self-control; and that b) lack of effective parenting can influence engagement in deviant behavior due to low self-control, which moderate the parenting deviance association regardless of sex and cultural background (Gottfredson & Hirschi, 1990). The GTC further suggests that individuals with low self-control often engage in a variety of deviant behaviors (e.g., substance abuse, aggression, theft, personal and property, violent offenses.

Self-control is defined as an individual difference characteristic that ranges from low to high (Crosswhite & Kerpelman, 2009). Persons with low self-control engage in behaviors that involve immediate gratification, are risky or thrilling, involve little thought processing, involves pain or discomfort to the victims, and lack a long-term goal. Persons with high self-control are able to problem-solve, engage in planning, set and attain goals, focus on long term goals, restrain behavior, and delay responses for long term rewards. Crosswhite and Kerpelman (2009) noted that there is robust empirical evidence that self-control is associated with deviance; however, there is limited evidence of the influence of parenting on deviance.

Crosswhite and Kerpelman (2009) identified four parenting practices that are influential in the development of self-control: a) attachment between parent and child, b) parental supervision, c) recognition of deviant behaviors, and d) punishment of deviant acts. They noted that if all four elements of parenting practices are present, the child will develop self-control. However, they also noted that if one of the elements are missing, the child is more likely to develop less self-control, which increases the likelihood that deviance will occur.

Several research studies have demonstrated that the main cause of self-control is effective parenting practices (Meldrum, Young, Carter, & Flexon, 2012). This research has been interpreted largely from a "parenting effects" perspective, where the socialization practices of parents influences the development of a child's level of self-control. Meldrum et al. (2012) noted that there is a preponderance of literature that

examines the relationship between parenting and self-control but that there is little attention paid to the influence of self-control on parenting. Meldrum et al. (2012) also suggested a "child's effects" perspective, where the self-control of a child influences parental socialization – that is a child with high self-control as evidenced by low levels of externalizing and internalizing behaviors will experience more positive parenting including attachment and consistent monitoring and discipline. These authors suggested that early parental socialization practices influence the development of self-control and adjustment in children. This combination of characteristics forecasts low levels of behavioral and emotional difficulties during adolescence and young adulthood (Brody, Dorsey, Forehand, & Armistead, 2002).

Likewise, it is presumed that children who are impatient, impulsive, and restless are more difficult to care for as they demonstrate low self-control. These children tend to provoke more frustration, hostility, harsh or erratic discipline, and inconsistent monitoring from their parents. It is believed that such ineffective parenting also influences self-control. This "child effect" may also shape a child's later interactions with parents and thus may also better explain the effects of parenting on deviant adolescent behavior. While self-control is not the only moderating mechanism between parenting and deviance, this psychological factor was examined closely in this study. Few studies have examined the bidirectional effects of the dynamic, interactive relationship between parenting and deviance and showed a gap in the literature. Failure to consider

these effects limits our understanding of this developmental process (Gault-Sherman, 2012).

Social Factors

Several sociocultural factors and social systems are associated with deviance including race, gender, family and peer association, and particularly, socioeconomic status (SES) (Gault-Sherman, 2012). Race and gender disparities for deviant adolescent behaviors have been noted in the literature. In the schools, minority students, particularly Black males, are disproportionately represented in disciplinary hearings in the schools (U.S. Department of Education, 2016) and account for 27% of law enforcement referrals and 31% of school related arrests (U.S. Department of Education, Office of Civil Rights, 2014). Despite these disparities in adjudication, a meta-analysis showed that targeted interventions for both Black and White students yield the same results of reductions in delinquency and improvements in school participation, academic achievement, peer relations, and psychological functioning (Barrett & Katsiyannis, 2015).

Research on family and peer influences suggested that when combined, these influences exacerbate the effects of delinquency (Benson & Buehler, 2012). Adolescents exposed to negative family interactions and deviant peers experience a combination of risk that exacerbate aggression. However, time spent with peers outside of school allows the adolescent the time to recover or renew from stresses from the family interactions (Benson & Buehler, 2012). These types of sociocultural influences help to explain the parent deviance association.

Economic resources are another important aspect of the person in the sociocultural context and is related to family income and resource availability. It is assumed that one's income allows them greater access to resources and positive outcomes. However, high income failed to protect youth from certain risk-taking behaviors as the research show positive associations between marijuana usage, binge drinking, and aggression among these adolescents (Benson & Buehler, 2012). Similarly, it was noted that "adolescents from middle and upper-income families experience achievement pressures, perfectionistic strivings, and deficits in supervision and closeness that compromise development" (as cited in Benson & Buehler, 2012, p.1215). These findings suggested that income is an important sociocultural factor that may moderate the effects of parenting on adolescent deviance. An emphasis on the socioeconomic status (SES) of the family as an important moderating factor of deviant adolescent behavior was explored in this research study.

Socioeconomic Status (SES)

The economic status or the family income is an important sociocultural factor that moderated the effects of delinquency. Most of the developmental research on adolescent delinquency has focused on poor parenting practices (e.g., harsh, inconsistent discipline) on adolescent outcomes (De Haan et al., 2010; DeCoster, 2012; Fosco et al., 2012; Gault-Sherman, 2012; Meldrum et al., 2012). However, the majority of these studies of adolescent development have neglected the role of family resources on adolescent problem behavior. Low, Sinclair, and Shortt (2012) examined the role of the family

socioeconomic context and its influence on adolescent delinquency. A structural equation model was used to examine the process of poor parenting and older sibling delinquency on adolescent outcomes. The data suggested that family economic conditions encourages the role of parenting, sibling, and peer processes in the transmission of risk of adolescent delinquency (Low et al., 2012).

Most of the literature on parenting and deviant adolescent behavior fail to take into-account the role of the specific indicators of family income despite disparaging effects. Barrett and Katsiyannis (2015) studied juvenile delinquency recidivism in Black and White youth. Their research showed that early adverse family systems disruption and school failure explained disparities in both prosocial (school achievement) and antisocial (juvenile delinquency) outcomes. However, they also noted the limitation of identifying those specific indicators of socioeconomic status (e.g., sociocultural factors) that contribute to delinquency such as parental characteristics, family history, and family income.

One such sociocultural factor related to socioeconomic status or family income is the adolescent's perception of community risk. Community risk, which has been defined in the literature as physical deterioration of the neighborhood and poor social bonds within the community, is thought to impact individual behavior (Lamont, Van Horn, & Hawkins, 2014). Previous research showed that youth perception of community risk is weakly correlated with deviant adolescent behavior and is therefore believed to be associated with other factors in addition to community risk (Lamont et al., 2014). These

researchers suggested that family risks (as measured by parental use of family management strategies) either ameliorate or exacerbate perceived community risks, which in turn predict individual behavior. Using a multileveled, moderated, mediation model, the results of this research show that multiple ecological risk factors explain the pathway to delinquency. Additional research was needed that explored the multiple risk factors that are associated with deviant adolescent behavior (Lamont et al., 2014).

Rekker et al. (2015) were the first to study within-individual changes in family SES and its association with delinquency from childhood to adolescence. They noted that previous criminological research show that SES is well documented as a correlate of juvenile delinquency. This research has typically shown that youth from low SES families are more likely to engage in deviant adolescent behaviors than youth from high SES families. It is also documented that while the poverty rate in America is 20%, more than half of the youth in America spend time in poverty before the age of 18. Using a fixed effects model, Rekker et al. (2015) found that within individual associations with SES moderate serious delinquency but not for minor delinquency. They found that the same youth are more likely to commit moderate and serious delinquency during those years when family SES is lower than when family SES is higher. They also found within individual changes in parenting to be related to minor delinquency. Youth were more likely to commit minor offenses during years in which they spent less time with parents and in which parents knew less about their activities. Contrary to the previous research literature, this study challenges the claim that the association between SES and

delinquency originated from early life phases (Lamont et al., 2014). Given the mixed findings of the research literature, further clarification was needed of the role of SES on parental supervision and monitoring and deviant adolescent behavior. The current research study assessed the relationships between the underlying psychosocial factors of self-control and SES on parenting and deviant adolescent behaviors.

Summary and Conclusions

Adolescence is the socially designated developmental period between childhood and adulthood. The period of adolescence is often a difficult transitional period with vulnerabilities to certain psychological and environmental influences and has the potential for either adaptive growth or risk for maladaptive outcomes (Calkins, 2011). Sameroff (2010) noted that depending on the family or other self-regulating systems involved with the adolescent, "desires for autonomy or intimacy can be fostered or thwarted", which can have significant impact on the adolescent's future functioning (p. 19).

Over the years, considerable attention has been paid to the developmental course that leads to deviance in adolescence. Early in the course of this particular developmental trajectory, deviant or anti-social behaviors may be seen as rule-breaking behaviors, disobedience or defiance, aggression or violence, lying, stealing, and property damage, which may have serious health risks for adolescents and may impact society as well. During later adolescence, the convergence of these types of anti-social behaviors, may become more severe over time and may lead to other deviant behaviors including

substance abuse, risky sexual behaviors, and delinquency (Fosco et al., 2012), if left unaddressed.

During adolescence, most youth typically "spend less time with their families, feel less close with them, and receive less supervision and monitoring from their parents" and spend increasingly more time with their peers (Fosco et al., 2012, p. 202; Keijsers et al., 2012). These adolescents may fail to reap the benefits of parental guidance and support and tend to seek the advice of their peers. Youth who are given excessive freedom and unsupervised time, a process known as premature autonomy, are at significant risk of poor outcomes including escalation in substance use, delinquency, violence, high risk sexual behavior, and aggression towards a partner (Dishion, Nelson, & Bullock, 2004). Conversely, youth who are supervised too closely and whose parents exercise high levels of supervision and monitoring that involve more controlling forms of tracking and surveillance also tend to have poor adjustment, including higher levels of depression, low self-esteem, and doubts about one's own abilities to succeed (Stattin & Kerr, 2000) **.**

Social learning theory and a psychosocial model were used as a framework for this study to examine the relationships between the psychosocial factors of parental supervision and monitoring, self-control, SES, and deviant adolescent behavior. "In the social learning view, psychological functioning involves a continuous reciprocal interaction between behavior and its controlling condition" (Bandura, 1978). There is a large body of research evidence that showed that social learning concepts such as

differential association, modeling, definitions, and reinforcement, particularly involving family and peers, account for individual differences in deviant adolescent behavior (Akers, 2009). The psychosocial model was used in the current research study to illustrate that child-rearing characteristics (e.g., parental supervision and parental monitoring) influences or are influenced by delinquency and/or by other moderating problem behaviors of the child (e.g., self-control) and/or other social factors (e.g., SES).

The present study served to fill at least one of the gaps in the literature and extended knowledge in the discipline of adolescent development. This research study identified some of the other intra-individual factors that moderate the effects of parental supervision and monitoring on deviant adolescent behavior. Parental influence on deviant adolescent behavior has been studied for decades; however, there was limited research on other moderating mechanisms that explain the parent-deviance association. This research explored self-regulation and social economic status (SES) as the underlying psychosocial factors that moderate the relationship between parental supervision and monitoring and deviant behavior.

The quantitative nature of this study will employ a non-experimental, survey research design. A survey design is consistent with the process of exploring a relationship between parental supervision and monitoring and deviant adolescent behavior. To clarify the relationship between these various dimensions, inferential statistical techniques will be used to analyze the results of parent surveys and the relationship between continuous variables in the following Chapter 3: Research Methodology. Rather than categorizing

independent variables, regression techniques should be used because they have been shown to be superior to OVA methods (see Onwuegbuzie, 2000). Multiple linear regression/correlation (MRC) analyses will be used to make predictions about those factors that influence deviant behavior in adolescence.

Chapter 3: Research Method

Purpose of the Study

The purpose of this survey study was to explore relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by self-control (see Crosswhite & Kerpelman, 2009) and SES. It is important to understand the interaction between the psychological and social factors that contribute to both normal and atypical adolescent development.

The psychosocial factors that influence deviant adolescent behavior were explored in this research study. I aimed to identify the intraindividual characteristics and/or psychosocial factors that contribute to significant differences in parenting and deviant adolescent behavior. To clarify the relationship between these various dimensions, inferential statistical techniques were used to examine the relationships between this study's continuous variables. MRC analyses were used to make predictions about those factors that influence deviant adolescent behavior.

In this chapter, I include a description of the research design and rationale for why this particular design was chosen, sampling procedures, instrumentation, data analysis plan, threats to validity, and ethical considerations. Information about the population, sampling strategy, and procedures for recruitment and participation are presented. The data collection and data analysis processes are also discussed.

Research Design and Rationale

In this study, I attempted to understand the relationships between parental supervision and monitoring and deviant adolescent behaviors as moderated by certain psychosocial factors. The independent variables, including parental supervision, were generally defined as the more controlling forms of tracking and surveillance as well as premature autonomy while parental monitoring was defined as an awareness of an adolescent's daily activities. The dependent variable, deviant adolescent behavior, was generally defined by parental reports of any behavior that may result in disciplinary action whether at home, in school, or in the community. Moderating variables identified in this study in the relation between parenting and delinquent behavior were self-control and SES.

The research design was a nonexperimental, predictive study using a cross sectional, survey design methodology with a number of survey instruments. MRC analyses were used to explore predictive relationships between parental supervision, parental monitoring, and deviant adolescent behavior as well as the moderating influence of self-control and SES in this relation. The use of the survey design was considered more appropriate than quasi-experimental or causal comparative designs with analysis of variance (OVA) methods because the purpose of the study was to compare predictive relationships among continuous variables with each other instead of comparing group means. Onwuegbuzie (2000) noted that researchers should avoid categorizing variables, unless compelled to do so. Rather than categorizing independent variables, regression

techniques should be used because they have been shown to be superior to OVA methods (see Onwuegbuzie, 2000).

I used a cross-sectional survey methodology to collect data from parents to explore relationships between parental supervision, parental monitoring, and deviant adolescent behavior in middle and high school students. Survey research is often used to generalize from a sample to a larger population so that inferences can be made about some characteristic, attitude, or behavior of this population (Babbie, 2001). Survey research was also preferred because of the economy of this design and because of the quick turnaround of data collection. The survey design was cross-sectional, with data collected at one point in time. This form of data collection allowed the establishment of baseline data and raised questions so that interventions could be done at a later date. This study did not involve any direct intervention but has important social change implications. Uncovering the processes that contribute to deviant adolescent behaviors can provide an important contribution to future prevention research.

Methodology

Target Population

The participants in this study were the parents of middle and high school students (ages 12 – 18 years) who have reportedly engaged in any behavior that resulted in disciplinary action whether at home, in school, or in the community. Parent participants were selected because (a) they were an accessible population, (b) they were of age to provide informed consent, (c) they were presumed to have extensive knowledge of their

own parenting skills as well as knowledge about their adolescent's executive functioning skills or level of self-control and SES, (d) their educational backgrounds provided them with the necessary reading comprehension skills required to complete the questionnaires, and (e) the school districts educate a diverse group of students who come from varying ethnic and cultural backgrounds. Permission was obtained from the research and evaluation board of the local, public school system by completing a third-party research application that provided written information about the study in the form of a parent letter and a research survey announcement to parents of middle and high school students (see Appendix A).

Written information included a parent letter of invitation and a research survey announcement encouraging parents to participate in the study. Written information in the form of a parent letter and a survey announcement about the study was handed to students and given to parents at various venues (e.g., parent conferences, workshops, social media) that invited them to participate in an online survey. In the written information, a direct link to access the anonymous online survey was provided for parents to respond if interested. Parents were only allowed to participate in the survey one time. Informed consent procedures were outlined for those parents who had agreed to participate at the onset of the online survey and were again implied by the completion and submission of the online survey.

Sample and Sampling Procedures

In this study, I used a nonrandom, convenience sample of participants geographically limited to the state of Maryland. The participants of this study were a convenience sample of 84 parents of middle school students (ages 11 – 13) and high school students (ages 14 – 18) who have engaged in any behavior that may result in disciplinary action.

A power analysis, which is the probability that a statistical test will predict a real treatment effect, based on a correlation analysis chart developed by Cohen revealed that to detect an effect size of .30 at an alpha level of .05, and a power of at least .80, the study would require a sample of at least 84 people, as measured by a sample size tables (http://fsweb.berry.edu/academic/education/vbissonnette/tables/tables.html).

Procedures for Recruitment, Participation, and Data Collection

Written information in the form of a parent letter and survey research announcement was handed to students to give to their parents and provided to the parents at various venues (e.g., parent conferences, workshops, social media) in order to encourage their participation (see Appendix B and C). In the written information, parents were invited to participate in an anonymous online survey of their child's behaviors. An email address was provided for those interested parents to ask questions and to obtain more information before they consented to participate in the online survey. Parents were only allowed to participate in the survey one time. Informed consent for participation was obtained by parents prior to the initiation of the survey and implied again by the return of

the completed survey. The informed consent process included detailed information about the study, procedures for participation, a discussion of the risks and benefits of participation, the voluntary nature of the study, and ethical concerns, which were cited at the initiation of the online survey (see Appendix D). Pertinent email addresses were also provided to study participants in the event that they had additional questions or concerns.

Data were collected electronically using SurveyMonkey, a web-based, Internet survey tool. Interested parents were given a direct link to begin the anonymous online survey. Using SurveyMonkey, parents were asked to complete a series of questions online in order to obtain information related to the various constructs, including parental supervision, parental monitoring, self-control, SES, and adolescent deviance using selected instruments. Parents were briefly surveyed to assess their presence at home when their adolescent comes home from school. Parents were surveyed to assess the degree to which they monitor their adolescents' activities and have knowledge of their child's whereabouts and friends. Parents were also asked to report their adolescent's self-control and their SES, using selected instruments. Basic demographic information was also collected at the end of the survey; however, the data did not include any specific identifying information. Information about the adolescent's behaviors at home, at school, and in the community and basic demographic information about the parents were collected (See Appendices G – L). No identifying information was collected. Parent data were saved and submitted online and included in the current data collection for the study.

Instrumentation and Operationalization of Constructs

Measures of Parental Supervision

For purposes of the current study, parental supervision is defined as the level of parental involvement whether high or low and was used to assess autonomy in adolescents. The Parental Supervision Measure (Lippold, Greenberg, & Collins, 2013) is a brief measure of after school supervision and parent knowledge of youth risk behaviors. This parental report was used as the measure of parental supervision. Permission was obtained from the author in writing to use this measure (see Appendix E). The two items on this measure were rated on a 5-point scale of frequency (1= *always* to 5 = *never*) and took approximately 5 minutes to administer. This standardized measure of supervision is a reliable measure (a = 0.81). While the Parental Supervision Measure (Lippold et al., 2013) purports to measure parent knowledge of youth risk behaviors, there were no published validity data to report on this measure.

Measures of Parental Monitoring

Similarly, the Supervision – Primary Caregiver measure (Fasttrackproject.org, 1995b) was used to assess the primary caregiver's ability to monitor their adolescent through their knowledge of the child's whereabouts, the amount of discussion and planning regarding communication of the child's whereabouts, the amount of time that the child is unsupervised, and the caregiver's knowledge of the child's friends. Permission was obtained from the author in writing to use this measure (see Appendix F). Parents were asked to identify how many of their child's close friends they knew on a

scale of 1 (*all of them*) to 5 (*none of them*) and were also asked how often they knew who their child was with on a scale of 1 (*all of the time*) to 4 (*none of the time*). This standardized measure was a reliable measure of parental supervision (a = .76). A single confirmatory factor analysis using a least squares estimation procedure was used to assess statistical support for the construct of supervision/involvement. The constructs of discussing daily activities, curfew times, and influence of friends consisted of only two items, and reliability estimates were based on interitem correlations (fasttrackproject.org, 1995).

Measures of the Moderating Psychosocial Factors

Self-Control. Self-regulation, or the ability to control one's impulses and to keep track of the effect of one's behaviors on others, was measured using the BRIEF 2 Parent Form (PAR, 2015). The BRIEF 2 Parent Form is a 63-item questionnaire designed to assess every day behaviors in a range of children and adolescents for whom there may be concerns about self-regulation. The BRIEF 2 Parent Form offers several clinical scales that contribute to three indexes, the Behavior Regulation Index , the Emotional Regulation Index, the Cognitive Regulation Index, and an overall summary score, the Global Executive Composite (GEC) based on the parent's report. The BRIEF 2 Parent Form was used to assess self-control as relevant to this study. Permission and licensing to use this measure online was obtained upon the purchase of the assessment instrument and manual (See Appendix B).

The BRIEF 2 yields high internal consistency reliability coefficients (ranging from .87 to .91) as well as high interrater reliability (a >.80). The clinical norms were drawn from a normative sample based on U.S. Census data in 3,603 children, ages 5 to 18 who were from rural, suburban, and urban areas. The standardization samples included (Parent Form N = 1,400, Teacher Form N = 1,400, and Self-Report N = 803) children between the ages of 5 to 18 years (11 – 18 years for the Self-Report Form) with no history of special education, psychotropic medication usage, neurological disorders, or attention disorders. Concurrent validity is appropriate for assessing the validity of a study. This form of validity determines whether one can draw meaning and useful inferences from scores on the instrument and how they correlate with other results (Creswell, 2003). The BRIEF 2 is correlated with other measures of behavior and IQ, including the CBCL, BASC-2, Conners 3, ADHD-RS-IV, RIAS, WISC-IV, and WAIS-IV. Concurrent validity of the scores on the BRIEF 2 was significantly correlated with similar scales, including the BASC and the Conners parent and teacher rating scales, leading the authors to conclude that this instrument measures similar constructs of ADHD and executive functioning (Sullivan & Riccio, 2007).

SES. SES is considered a "fundamental determinant of human functioning" and has been linked to a higher prevalence of childhood disruptive behaviors and to negative parenting styles (Callahan & Eyberg, 2010, p. 126). The Hollingshead Four Factor Index of Social Status (Hollingshead, 2011) was used to estimate socioeconomic status. According to Hollingshead, the four factors of marital status, sex, occupation, and

education are an estimation of social status. The data show a high degree of correlation for median income (r=.67 for females and r=.78 for males) with 1970 United States Census data (Hollingshead, 2011). Callahan and Eyberg (2010) found significant predictive validity as scores obtained on the Hollingshead Four Factor Index of Social Status (HI) correlated with parent income, occupation, and education. They also found that it has construct validity as the HI was significantly positively related to parent behavior, specifically maternal prosocial self-talk. The HI is a common method of measuring socioeconomic status and is most often used in clinical child treatment literature (Adams & Weakliem, 2011; Callahan & Eyberg, 2010). The HI is a public domain instrument that was most recently published in a scholarly journal (Adams & Weakliem, 2011). Three attempts were made before contact with the publisher for authorization was provided to use this tool in the research survey.

Measures of Deviance

The dependent variable, deviant adolescent behavior, was generally measured by parental reports of any behavior that resulted in disciplinary action. The Parent Report on Child Delinquency (Fasttrackproject.org, 1995a) was used to assess parental reports of their adolescent's delinquent activities. It measured such areas as property damage, theft, assault, and substance use. Permission was obtained from the author in writing to use this measure (See Appendix F). Using a Likert scale, the parents are asked to report the number of times their child engaged in such activities. The clinical sample included 387 normative and 155 high risk control subjects in the primary analysis of Cohort 1 in year

13. The internal consistency of each area was examined by computing the alpha coefficients for both the normative (*a* =.57 -.76) and high-risk control samples (*a* =.51 -.80).

Operationalization of Variables

Parental Supervision: High levels of parental involvement with more controlling forms of tracking and surveillance, which can lead to poor adjustment in adolescents (Keijsers et al., 2012; Stattin & Kerr, 2000). Low levels of parental involvement that occur during puberty when many parents tend to relinquish support and monitoring of their adolescents at around ages 13 – 14, referred to as "premature autonomy" (Dishion, Nelson, & Bullock, 2004, p. 516), which may also lead to poor adjustment in adolescents. The two items on the Parental Supervision Measure (PSM) are rated on a 5-point scale of frequency (1= always to 5 = never). Items are added to derive a total score the PSM. This total score was used in the multiple regression analysis as the measure of parental supervision.

Parental Monitoring: Parenting practices and family relationships that promote autonomy, closeness, and connectedness (Fosco et al., 2012). A parent's awareness of an adolescent's daily activities (Copeland-Linder et al., 2011). Thirteen of the twenty items on the Supervision – Primary Caregiver scale are used for scaling and coded on item specific 5-point scales (1 = Almost Never and 5 =Almost Always). The items are totaled to derive the Supervision –Primary Caregiver score. This score was used in the multiple regression analysis as the measure of parental monitoring.

Psychosocial Factors: The interaction between the psychological factor of self-control and the social factor of socioeconomic status. These psychosocial factors moderate parental influence and underlie deviance in adolescence. Researchers explored self-regulation and cognitive skills as "potential mediating mechanisms that may help to explain the parenting-deviance association" (Crosswhite & Kerpelman, 2009, p. 613).

Self-Control: The BRIEF 2 Parent Form contains 63 items that are scored and contribute to eight clinical scales including: Inhibit, Self-Monitor, Shift, Emotional Control, Working Memory, Plan/Organize, Organization of Materials, and Task-Monitor. Three additional validity scales measure Inconsistency, Negativity, and Infrequency of the respondent. The clinical scales contribute to three broader indices of Behavior Regulation, Emotion Regulation, and Cognitive Regulation, which make up the overall Global Executive Composite (GEC). The overall GEC was used in the multiple regression analysis as a measure of self-regulation as this scale consists of scores on the Emotional Control, Inhibit, and Shift clinical subscales.

Socioeconomic Status: The Hollingshead Four Factor Index of Social Status (HI) correlates with parent income, occupation, and education. According to Hollingshead, the four factors of marital status, sex, occupation, and education are an estimation of social status. The computed scores are aggregated into groups of scores that encompass the major strata symbolic of social standing in contemporary American society (Adams & Weakliem, 2011). This computed score will be used in the multiple regression analysis as a measure of socioeconomic status.

Deviant Adolescent Behavior: Parental reports of any adolescent behavior that may result in disciplinary action whether at home, in school, or in the community. Examples of deviant school behaviors as defined by the Maryland Guidelines for a State Code of Discipline (MSDE, 2014) for school disciplinary action (e.g., removal from school, alternative placement, and/or expulsion) include such behaviors as: poor school conduct, inappropriate sexual behavior in school (e.g., sexual assault, harassment); bullying and harassment (e.g., persistent bullying, cyberbullying); threats (e.g., bomb threats or threatening a school shooting); destruction of school property; substance use or possession (e.g., alcohol, inhalants, drugs/controlled substances), violence (e.g., preplanned fighting or any act resulting in serious bodily injury); and possession of explosives or firearms (MSDE, 2014).

The Parental Report on Child Delinquency is a 12-item instrument that asks parents to rate their knowledge of the frequency of their child's delinquent behaviors including theft, property destruction, assault, and substance abuse. This instrument uses a Likert type scale (1=Never, 2=Once, 3=Twice, 4=Three Times, and 5= Four or more times). Three delinquency scales are created by summing the individual items (after adjusting the scales from 0 – 4 rather than 1 -5). The three delinquency scales include: 1) 3 specific subscales measuring substance abuse, theft, and personal violence; 2) 1 general offense scale of status offenses; and 3) 1 summary scale of general delinquency. The summary scale score was used in the multiple regression analysis as a measure of general delinquency.

Data Analysis Plan

Preliminary analyses included the calculation of descriptive statistics for the mean scores and standard deviations of the PSM, the SQPC measure, the BRIEF 2, the HI, and the PRCD. Basic demographic information was also collected; however, data did not include any specific identifying information. The means were used as indicators of the average score of the participant's experience of the variables in this study.

Further, the continuous independent, moderating, and dependent variables were assessed for normality and as an indication of whether the data set follows a normal distribution. Using SPSS Statistics, the Kolmorgorov-Smirnov and the Shapiro-Wilkes normality tests were conducted. The assumption of a linear relationship between these variables were also evaluated.

Inferential analysis included determining the correlational relationships between the PSM, the SQPC, the BRIEF 2, the HI, and the PRCD using Pearson Product Moment correlations and multiple regression analyses. MRC analyses were used to assess any possible associations between variables and to determine whether any significant predictive relationships exist between parental supervision, parental monitoring, self-control, SES, and deviance. It also controlled for a possible Type I error and inter-correlations between the sets of continuous variables. A hierarchical analysis of data was used to identify the presence and nature of the moderating effects while controlling for the potential confounding influence of the independent variables (Cohen, Cohen, West, & Aiken, 2003). The data were analyzed using the Statistical Package for Social Sciences

Version 24.0. The research inquiries and instruments used for measurement of variables in this study allowed for the data to be analyzed using several statistical procedures. The data analysis strategy by hypothesis were presented in the following section.

Data Analysis by Hypothesis

The research questions along with the corresponding hypotheses are listed below. MRC analyses were used to test the hypotheses.

Research Question 1: Is there a relationship between parental supervision as defined by high levels of parental involvement (tracking and surveillance) and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students?

$H_1$1: There is a significant relationship between parental supervision (tracking and surveillance) and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students.

$H_0$1: There is no significant relationship between parental supervision (tracking and surveillance) and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students.

To evaluate Hypothesis 1, a multiple regression analysis was used. The PSM serves as the predictor variable and the PRCD serves as the criterion variable.

Research Question 2: Is there relationship between parental supervision as defined by low levels of parental involvement (premature autonomy) and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students?

$H_1$2: There is a significant relationship between low levels of parental supervision (premature autonomy) and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students.

$H_0$2: There is no significant relationship between low levels of parental supervision (premature autonomy) and deviant adolescent behavior as measured by parental reports of behavior of middle and high school students.

To evaluate Hypothesis 2, a multiple regression analysis was used. The PSM serves as the predictor variable and the PRCD measure serves as the criterion variable.

Research Question 3: Is there a relationship between parental monitoring as defined by the parent's awareness of the adolescent's daily activities (greater autonomy) and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students?

$H_1$3: There is a significant relationship between parental monitoring (greater autonomy) and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students.

$H_0$3: There is no significant relationship between parental monitoring (greater autonomy) and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students.

To evaluate Hypothesis 3, a multiple regression analysis was used. The SQPC measure will be used as the predictor variable and the PRCD will be used as the criterion variable.

Research Question 4: Does self-control moderate the relation between parent supervision and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students?

$H_1$4: There is a significant relationship between parental supervision, the moderating variable of self-control, and deviant adolescent behaviors as measured by parental report of behaviors of middle and high school students.

$H_0$4: There is no significant relationship between parental supervision, the moderating variable of self-control, and deviant adolescent behaviors as measured by parental report of behaviors of middle and high school students.

To evaluate Hypothesis 4, a multiple regression analysis was used. The PSM will be used as the predictor variable, the BRIEF 2 will be used as the moderating variable, and the PRCD measure will be used as the criterion variable.

Research Question 5: Does socioeconomic status (SES) moderate the relationship between parent supervision and deviant adolescent behavior as measured by parental report of behaviors of middle and high school students?

$H_1$5: There is a significant relationship between parental supervision, the moderating variable of SES, and deviant adolescent behaviors as measured by parental report of behaviors of middle and high school students.

$H_0$5: There is no significant relationship between parental supervision, the moderating variable of SES, and deviant adolescent behaviors as measured by parental report of behaviors of middle and high school students.

To evaluate Hypothesis 4, a multiple regression analysis was used. The PSM will be used as the predictor variable, the HI will be used as the moderating variable, and the PRCD measure will be used as the criterion variable.

Ethical Procedures

Ethical issues that arise during the course of the writing process for a research proposal should be anticipated by the researcher (Creswell, 2003). Permission was granted to gain access to the study participants at the intended research site (e.g., local, public school system). This process involved obtaining a written Letter of Conditional Approval from the Director of the Office of Research & Evaluation (ORE) at the local educational agency for access to potential participants for research purposes (See Appendix A). The Letter of Conditional Approval required an application signed by the

researcher, the immediate supervisor at the local education agency, and the dissertation chair (due after July 1), as well as an approved research proposal. The research proposal and the Letter of Conditional Approval was reviewed and approved by an Institutional Review Board (IRB) at Walden University who ensured that safety and privacy risks were minimized in relation to any anticipated benefits (IRB #03-14-18-0057361).

Potential parent participants received written information about the online survey research. In addition, an informed consent process involved the participants being informed about their right to participate or not, their right to withdraw their participation at any point, and that they are not under any obligation to complete the process once they began. Participants were informed in writing and asked to give their consent upon the initiation of the survey and again by the completion and submission of the survey, they had also given their implied consent. Additionally, the researcher provided the name and email addresses of pertinent parties in order to give the participants the opportunity to ask questions about the nature of the study, the duration, procedures involved, potential benefits and foreseeable risks before they complete the survey.

The data gathered from the survey research was completely anonymous and was used only for this research purpose. No personal self-identifying information was requested or was required during the online survey. Once analyzed, the data became the sole property of the researcher, confidentially kept in storage, maintained for a period of five years, and will then be discarded. If the researcher was contacted via email by the potential participants prior to beginning the online survey to ask questions or for

clarification, contact information was deleted immediately The IRB approval number is (IRB #03-14-18-0057361).

Summary

The purpose of this study was to explore relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by certain psychosocial factors including self-control (Crosswhite & Kerpelman, 2009) and social economic (SES) status. Moderating psychosocial factors including self-control and socioeconomic status that influence deviance were explored because it is important to this study to identify those underlying, intra-individual characteristics and/or factors that contribute to the association between parenting and deviant adolescent behavior.

The research design was a MRC analysis utilizing cross sectional, survey design methodology with a number of survey instruments. A cross-sectional, survey methodology was used to collect data from parents directly to explore relationships between parental supervision, parental monitoring, and deviant adolescent behavior. This study did not involve any direct intervention but will have important social change implications. Uncovering the processes that contribute to deviant adolescent behaviors can provide an important contribution to future prevention research.

The participants were the parents of middle and high school aged students that have engaged in any behavior that may result in disciplinary action whether at home, in school, or in the community. The participants of this study were a convenience sample of eighty-four parents of middle school students (ages 11 – 13) and high school students

(ages 14 – 18) who will complete the online survey. The sample was non-random and stratified so that the demographic characteristics of sex, age, race, parent's level of education, and family structure were represented in the sample and so that the sample reflected the true proportion of individuals with these characteristics in the population (Fowler, 2002).

Written information about the study was provided to parents that invited them to participate in an online survey of their child's behaviors. Pertinent email addresses were provided for those interested parents to obtain more information and to seek clarification before participating in the study. Interested parents were given a direct link to access the online survey. Parents were only allowed to participate in the survey one time. Parent participants were informed about their right to participate, the risks and benefits of participation, that no compensation is available, that they can withdraw their participation at any point and that they are not under any obligation to complete the process once they begin the survey at the initiation of the survey. Informed consent for participation was obtained at the onset of the survey and was implied upon submission of the completed surveys for analyses.

Data was collected electronically using Survey Monkey, a web-based, internet survey tool. Parents were given a direct link to begin the online survey. Using Survey Monkey, parents were asked to complete a series of questions online in order to obtain the information related to the various constructs including parental supervision, parental

monitoring, psychosocial factors and deviant adolescent behavior using selected instruments.

Parents were asked to report their knowledge of their adolescent and certain moderating psychosocial factors including self-control and social economic status using selected instruments. Parents were briefly surveyed to assess their presence at home when their adolescent comes home from school. Parents were surveyed to assess the degree to which they monitor their adolescents' activities, and have knowledge of their child's whereabouts and friends. Information about the adolescent's social, emotional, and behavioral functioning at home and in the community were collected. Parent data was saved and submitted online and included in the current data collection for the study.

The quantitative nature of this study employed a non-experimental, MRC analysis using a survey research design to explore relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by certain psychosocial factors. To clarify the relationship between these various dimensions, inferential statistical techniques were used to analyze the results of various parent questionnaires, and the relationship between continuous variables. A MRC analysis was used to make predictions about those factors that influence deviant adolescent behavior. The results will be presented in Chapter 4.

Chapter 4: Results

Introduction

In this study, I explored the relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by self-control and SES in middle and high school students. Five research hypotheses were tested using a variety of statistical techniques. The research questions were as follows:

Research Question 1: Is there a relationship between parental supervision as defined by high levels (tracking and surveillance) of parental supervision and deviant adolescent behavior, as measured by parental reports of behavior in middle and high school students?

$H_1$1: There is a significant relationship between parental supervision (tracking and surveillance) and deviant adolescent behavior, as measured by parental reports of behavior of middle and high school students.

$H_0$1: There is no significant relationship between parental supervision (tracking and surveillance) and deviant adolescent behavior as measured by parental reports of behavior of middle and high school students.

Research Question 2: Is there a relationship between parental supervision as defined by low levels of parental supervision (premature autonomy) and deviant adolescent behavior, according to parent reports of behavior in middle and high school students?

$H_1$2: There is a significant relationship between low levels of parental supervision (premature autonomy) and deviant adolescent behavior, as measured by parental reports of behavior of middle and high school students.

$H_0$2: There is no significant relationship between low levels of parental supervision (premature autonomy) and deviant adolescent behavior, as measured by parental reports of behavior of middle and high school students.

Research Question 3: Is there a relationship between parental monitoring as defined by the parent's awareness of the adolescent's daily activities (greater autonomy) and deviant adolescent behavior as measured by parental reports of behavior of middle and high school students?

$H_1$3: There is a significant relationship between parental monitoring (greater autonomy) and deviant adolescent behavior, as measured by parental reports of behavior of middle and high school students.

$H_0$3: There is no significant relationship between parental monitoring (greater autonomy) and deviant adolescent behavior, as measured by parental reports of behavior in middle and high school students.

Research Question 4: Does self-control moderate the relationship between parent supervision and deviant adolescent behavior, as measured by parental reports of behavior in middle and high school students?

$H_1$4: There is a significant relationship between parental supervision and the moderating variable of self-control, and deviant adolescent behaviors, as measured by parental reports of behavior of middle and high school students.

$H_0$4: There is no significant relationship between parental supervision, the moderating variable of self-control, and deviant adolescent behaviors, as measured by parental report of behavior of middle and high school students.

Research Question 5: Does SES moderate the relationship between parent supervision and deviant adolescent behavior, as measured by parental reports of behavior in middle and high school students?

$H_1$5: There is a significant relationship between parental supervision, the moderating variable of SES, and deviant adolescent behaviors, as measured by parental reports of behavior of middle and high school students.

$H_0$5: There is no significant relationship between parental supervision, the moderating variable of SES, and deviant adolescent behaviors, as measured by parental reports of behavior of middle and high school students.

In this chapter, I present demographic information regarding the participants and summarize the results of the basic descriptive statistics and inferential data analysis based on the raw data collected from the online parent survey.

Data Collection

After 2 months of data collection efforts at the six approved schools during the 2017-2018 school year period between April 2018 through June 2018, less than 50% (n = 39) of the desired sample size had been achieved. No data collection efforts were allowed over the summer break. An extension of the permission to collect data in the schools was obtained early in August 2018 that extended the data collection period in the schools through June 30, 2019. Four additional schools agreed to participate during the following 2018-2019 school year. Written information in the form of a parent letter and a survey announcement about the study was handed to students to take home to their parents. Additional efforts were made to present the data to parents at school meetings, school sporting events, parent and mental health conferences, and via school-based social media (e.g., Robocalls, email from the schools, and announcements on school websites). By the end of the latter school year and within a total of 12 months of data collection, the desired sample size of 84 was achieved. By June 30, 2019, a total of 87 parents completed the online Walden Parent Survey. The online Walden Parent Survey consisted of approximately 120 questions that included demographic questions as well as five standardized assessment instruments including the PSM, the SQPC measure, the BRIEF 2, the HI, and the PRCD.

Data were collected electronically using SurveyMonkey, a web-based, Internet survey tool. Interested parents were given a direct link to begin the anonymous online survey. Parent data were saved and submitted online and were included in the current

data collection for the study. Once the desired sample size was achieved, the study was closed, and no further responses were obtained. The data were exported from SurveyMonkey to an EXCEL file. These files were downloaded into a SPSS file, which was stored on a password protected USB storage device. The USB storage device was stored in a fireproof, personal safe that was free from risk of damage and only accessible to me. The data will be retained for 5 years and will not be used for any future research, per the APA's ethics code (APA, 2016) on record keeping.

Sample Demographics

Demographic characteristics of the survey participants included a total of 87 parents who attempted to complete the online Walden Parent Survey. Of the total number of participants, 70 (80.45%) surveys were completed, and 17 (19.54%) were incomplete. Out of concern for reporting possible missing data, a G*Power statistical test was run to calculate sensitivity and to derive the optimal sample size for the study, which indicated that a survey sample size of only 55 was needed. Thus, data collection efforts exceeded the derived sample size.

The survey participants were 62 (88.57%) mothers and 8 (11.43%) fathers of varied ethnicities, including 46 (65.71%) Black or African American, 16 (22.86%) White, 5 (7.14%) Hispanic or Latino, 2 (2.86%) Asian, and 1 (1.43) Other. Of the participants, 35 (50%) parents completed graduate level education, 22 (31.42%) were college graduates, 9 (12.86%) had partial college or other specialized training, 2 (2.86%) had a high school diploma, and 2 (2.86%) had less than a 12th-grade education. Thirty-seven

(52.86%) of the study's sample of parent participants earned $100,000 or more per year, 22 (31.43%) earned $50,000 to $100,000 per year, while 10 (14.29%) earned less than $50,000 per year. Parents reported that of the adolescents, 37 (52.86%) were 12 to 13 years of age, while the remaining 32 (45.71%) students were 14 to 18 years of age with one (1.43%) of unknown age. Further, 40 (57.14%) were male and 30 (42.86%) were female. Demographic characteristics about the study's participants and the adolescents on whom the data were reported are provided in Table 1.

Table 2

Demographic Characteristics of Study Sample

Parents:	N	Percentages
Mothers	62	88.57%
Fathers	8	11.43%
Ethnicity:	N	Percentages
Black/African American	46	65.71%
White	16	22.86%
Hispanic/Latino	5	7.14%
Asian	2	2.86%
Other	1	1.43%
Education:	N	Percentages
Less than 12th grade	2	2.86%
High school graduate	2	2.86%
Partial college	9	12.86%
College graduate	22	31.42%
Graduate education	35	50.00%
Income:	N	Percentages

Less than $30,000 per year	3	4.29%
$30,000 - $50,000 per year	7	10.00%
$50,000 – $70,000 per year	9	12.86%
$70,000 - $90,000 per year	7	10.00%
$90,000 - $100,000 per year	6	8.57%
$100,000 or more per year	37	52.86%
Unknown	1	1.43%

Age of adolescents	N	Percentages
12 years	20	28.57%
13 years	17	24.29%
14 years	8	11.43%
15 years	7	10.0%
16 years	6	8.57%
17 years	8	11.43%
18 years	3	4.29%
Unknown	1	1.43%

Gender of the adolescent	N	Percentages
Male	40	57.14%
Female	30	42.86%

Results

Baseline Descriptive Statistics

The PSM subscales, SQPC, BRIEF2 PRS, HI, and PRCD scales were the measures used for this study (See Table 2). Descriptive statistics of the survey sample were used to obtain measures of central tendency and measures of spread. Preliminary data analysis involved the calculation of descriptive statistics as the mean scores and standard deviations were calculated (See Table 2).

While frequency distributions (histograms) were used for checking for normality visually, skewness and kurtosis values were also computed as measures of normality. Skewness indicates symmetry in a distribution of scores where a skewness value of zero is the expectation for a normal distribution and a value of > +/- 1.00 indicates significant non-normality of the distribution of scores (Cain, Zhang, & Yuan, 2017). Kurtosis indicates the peakedness or flatness of a distribution of scores, where a kurtosis value of zero is the expectation for a normal distribution of scores and a value of > +/- 3.00 indicates significant peakedness (e.g., the distribution is considered leptokurtic) or flatness (e.g., the distribution is platykurtic) (Cain et al., 2017). Skewness and kurtosis values suggested that the assumption of normality was met for all variables with the exception of the dependent variable, the Parent Report of Child Delinquency (PRCD) Total Score, which was positively skewed to the right suggesting extreme scores and a degree of distortion from normality. As a result, a leptokurtic distribution was also

indicated on the PRCD due to the outliers. Baseline descriptive statistics can be found in Table 2.

Table 3

Descriptive Statistics for Study Variables

Variables	N	*M*	*SD*	Min	Max	Skewness	Kurtosis
PSM: Often adult home	82	3.77	1.200	1	5	-.681	-.669
PSM: Child home before	82	3.07	1.421	1	5	.027	-1.351
SQPC total score	56	67.00	5.628	57	82	.413	-.027
BRIEF2 PRS mod	65	1.66	.735	1	3	.634	-.878
HI status mod	69	2.28	.725	1	3	-.476	-.958
PRD: Total score	68	12.75	1.397	12	18	2.155	4.216

As different formulations for skewness and kurtosis exist in the literature, a one-sample Kolmogorov-Smirnov (K-S) and the Shapiro Wilk tests of normality were also used in order to provide an indication of whether the data followed a normal distribution. The K-S test and the Shapiro-Wilke test were used to determine the accuracy of the distribution of scores in relation to an assumed population distribution**.** According to these formulations, the assumption of normality was not met. The data did not follow a normal distribution in our population.

According to the available literature on assessing normality assumptions, the K-S test should no longer be used due to its low power (Ghasemi & Zahediasl, 2012). These authors noted that it is preferable that normality be assessed both visually and with normality tests of which the Shapiro-Wilke test is highly recommended. Moreover, with large enough sample sizes ($n > 30$), the violation of normality assumption should not cause major problems (Ghasemi & Zahediasl, 2012). We can use parametric procedures even when the data are not normally distributed. In larger samples, the sampling distribution tends to be normal regardless of the shape of the data.

Statistical Assumptions

A multiple linear regression analysis was selected as the statistical test to answer the five proposed research questions. Before considering the regression model of a linear relationship between the independent and dependent variables, certain other assumptions must be met. The assumptions were observations must be independent of errors, there must be an absence of multicollinearity and of significant outliers, and outcome variables must be moderately correlated as the data must pass these assumptions for multiple regression analysis in order to provide valid results (Creswell, 2003).

As part of the regression analysis, the Durbin-Watson statistical test was computed to test for the assumption of the independence of errors. Durbin-Watson values of less than 1 or greater than 3 violate the assumption of the independence of errors. The Durbin-Watson values for the regression model used in this study were > 1.0 and < 3.0, which indicates that the assumption of independence of errors were not violated.

To test for the absence of multicollinearity among the predictor variables, a variance inflation factor (VIF) was computed for each predictor in the regression model. A VIF of near 1.0 indicates the absence of multicollinearity; while a VIF of > +/- 5 indicates significant multicollinearity**.** VIF values were 1.000. None of the predictor variables had a value greater than 1.000, which suggests that the assumptions of multicollinearity were not violated.

To test for the assumption of homoscedasticity or outliers in the distribution of all variables, scatterplots were generated as part of the regression model. The assumptions of homoscedasticity were evaluated. The scores were equally distributed above and below zero, indicating that the assumption of homoscedasticity was not violated.

Data Analysis

The data were analyzed using the IBM Statistical Package for Social Sciences (SPSS) version 25 (updated version). Multiple Regression Correlation (MRC) analyses were used to examine possible associations and to determine whether significant predictive relationships existed among the variables of supervision, monitoring, self-control, socioeconomic status, and deviant adolescent behaviors. Inferential analysis involved using the Pearson Product Moment Correlation, simple linear regression analysis and moderated, multiple regression analyses. The statistical analysis strategy by research question and/or hypothesis is presented in the next section**.**

Research Question 1

Research Question 1 stated, "Is there a relationship between parental supervision as defined by high levels of parental supervision (tracking and surveillance) and deviant adolescent behavior, as measured by parental reports of behavior of middle and high school students?" The null hypothesis ($H_0 1$) stated, "There is no significant relationship between high levels of parental supervision (tracking and surveillance) and deviant adolescent behavior, as measured by parental reports of behavior of middle and high school students". A Pearson Product Correlation Coefficient was run to determine the relationship between these variables. To evaluate this hypothesis, a simple linear regression analysis was performed to examine the relationship between high levels of parental supervision and deviant adolescent behavior.

The PSM: Often Adult Home recode subscale score (question #1) served as the predictor variable for high levels of parental supervision (tracking and surveillance) and the PRCD total score served as the criterion variable for deviant adolescent behavior. Pearson bivariate correlation results showed a negative correlation between high levels of parental supervision and deviant adolescent behaviors, which was statistically significant (r = -.278, n = 68, p = .011). The results of the regression analysis were statistically significant for high levels of supervision (tracking and surveillance) being able to predict deviant adolescent behavior, B = -.337, t (67) =-2.351, 95% CI [-.623, -.051], p = 0.22. The regression model was also statistically significant F (1, 66) = 5.528, p =.022. The predictor variable accounted for .077% of the variance in scores of PSM Often Adult

Home recode subscale score (as measured by adjusted R^2). Thus, the null hypothesis was rejected. There was a significant relationship between high levels of parental supervision (tracking and surveillance) and deviant adolescent behavior.

Research Question 2

Research Question 2 stated, "Is there a relationship between parental supervision as defined by low levels of parental involvement (premature autonomy) and deviant adolescent behavior as measured by parental reports of behavior of middle and high school students?" The null hypothesis ($H_0 2$) stated, "There is no significant relationship between low levels of parental supervision (premature autonomy) and deviant adolescent behavior as measured by parental reports of behavior of middle and high school students". A Pearson Product Correlation Coefficient was run to determine the relationship between these variables. To evaluate this hypothesis a simple linear regression analysis was performed to examine the relationship between low levels of parental supervision (premature autonomy) and deviant adolescent behavior.

The PSM: Child Home Before Adult recoded subscale score served as the predictor variable for low levels of parental involvement ("premature autonomy") and the PRD total score served as the criterion variable for deviant adolescent behavior. Pearson bivariate correlation results showed a negative correlation between low levels of parental involvement and deviant adolescent behaviors, which was statistically non-significant ($r = -.025$, $n = 68$, $p = .418$). The results of the regression analysis were also statistically non-significant for low levels of supervision (premature autonomy) being able to predict

deviant adolescent behavior, B = -.024, t (67) = -.207, 95% CI [-.258, .209], p = .837. The regression model was also statistically non-significant F (1, 66) = .043, p =.837. The predictor variable accounted for .001% of the variance in scores of PSM Child Home Before Adult (as measured by adjusted R^2). The null hypothesis was supported. There was no significant relationship between low levels of supervision ("premature autonomy") and deviant adolescent behavior in middle and high school students.

Research Question 3

Research Question 3 stated, "Is there a relationship between parental monitoring as defined by parent's awareness of the adolescent's daily activities (greater autonomy) and deviant adolescent behavior as measured by parental reports of behavior (as measured by the PRCD total score) of middle and high school students?" The null hypothesis ($H_0$3) stated, "There is no significant relationship between parental monitoring (greater autonomy) and deviant adolescent behavior, as measured by parental reports of behavior in middle and high school students". A Pearson Product Correlation Coefficient was run to determine the relationship between these variables. To evaluate this hypothesis a simple linear regression analysis was performed to examine the relationship between parental monitoring (greater autonomy) and deviant adolescent behavior.

The SQPC total scale score served as the predictor variable for parental monitoring (greater autonomy) and the PRCD total score served as the criterion variable for deviant adolescent behavior. Pearson bivariate results showed a significant, negative correlation between parental monitoring and deviant adolescent behaviors, which was

statistically significant (r = -.239, n = 50, p = .048). The results of the regression analysis were statistically non-significant regarding parental monitoring (greater autonomy) being able to predict deviant adolescent behavior**,** B = -.061, t (49) = - 1.702, 95% CI [-.132, .011], p = .095. The regression model was also statistically non-significant F (1, 48) = 2.898, p =.095. The predictor variable accounted for .057% of the variance in scores of SQPC (as measured by adjusted R^2). The null hypothesis was rejected. While there was a significant, negative association between parental monitoring and deviant adolescent behavior, parental monitoring (greater autonomy) did not predict deviant adolescent behavior in middle and high school students.

Research Question 4

Research Question 4 stated, "Does self-control moderate the relationship between parent supervision and deviant adolescent behavior, as measured by parental reports of behavior in middle and high school students? The null hypothesis ($H_0$4) stated: "The moderating variable of self-control does not moderate the relationship between parental supervision and deviant adolescent behaviors as measured by parental report of behavior of middle and high school students". To evaluate this hypothesis, a moderated, multiple regression analyses was performed to examine the relationships between parental supervision (high levels) and deviant adolescent behavior.

To test this hypothesis, a multiple linear regression analysis was conducted. The outcome variable for analysis was the PRCD. The predictor variable for the analysis was the PSM: Often Adult Home Before Child recode subscale as it was the only predictor

variable found to be statistically significant. The moderator variable evaluated for the analysis was the BRIEF2 Parent Form total score. The relationship between the PSM: Often Adult Home Before Child recode subscale and PRCD was found to be statistically significant (*B* = -.337, 95% C.I. (-.623, -.051), *p* =.022.). The conditional effects of the PSM: Often Adult Home recode on the PRD had varying corresponding results. At low moderation, PSM: Often Adult Home recode (*B* = -.089, 95% C.I. (-.257, .079), *p* = .286) was non-significant. At middle moderation, PSM: Often Adult Home recode (*B* = 3.66, 95% C.I. (-.310, 1.041), *p* =.272) was non-significant. However, at high moderation, PSM: Often Adult Home recode (*B* = -1.016, 95% C.I. (-1.773, -.258), *p* =.016), the results were statistically significant. Thus, the null hypothesis was rejected. The results identified self-control as a negative moderator of the relationship between high levels of parental supervision and deviant adolescent behaviors in middle and high school students.

Research Question 5

Research Question 5 stated, "Does socioeconomic status (SES) moderate the relationship between parent supervision and deviant adolescent behavior, as measured by parental reports of behavior in middle and high school students? The null hypothesis ($H_0$5) stated: "The moderating variable of socioeconomic status does not moderate the relationship between parental supervision and deviant adolescent behaviors as measured by parental report of behavior of middle and high school students". To evaluate this hypothesis, a moderated, multiple regression analyses was performed to examine the relationship between parental supervision (high levels) and deviant adolescent behavior.

To test this hypothesis, a multiple linear regression analysis was conducted. The outcome variable for analysis was the PRD. The predictor variable for the analysis was the PSM: Often Adult Home Before Child recode subscale as it was the only predictor variable found to be statistically significant. The moderator variable evaluated for the analysis was the HI status score. The relationship between PSM: Often Adult Home recode and the PRCD was statistically significant (B = -.337, 95% C.I. (-.623, -.051), p =.022.); however, the conditional effects of the PSM: Often Adult Home recode on the PRCD were statistically non-significant at every level of analysis tested. At low moderation, PSM: Often Adult Home recode (B = -.604, 95% C.I. (-1.444, .237), p = .129); at middle moderation, PSM: Often Adult Home recode (B = -.107, 95% C.I. (-.627, .413), p =.672), and at high moderation, PSM: Often Adult Home recode (B = -.199, 95% C.I. (-.618, .219), p =.333), the results were non-significant. The null hypothesis was accepted. The results failed to support the HI status score as a significant moderator of the relationship between high levels of parental supervision and deviant adolescent behaviors in middle and high school students.

Summary

In this study, I explored the relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by self-control and SES in middle and high school students. After a total of twelve months of data collection, the derived sample size (n = 55) was exceeded. By June 30, 2019, a total of 87 parents attempted to complete the online Walden Parent Survey. The online Walden Parent

Survey consisted of 120 questions that consisted of demographic questions as well as five standardized assessment instruments including the PSM (Lippold et al., 2013), the SQPC measure (fastrackproject.org, 1995), the BRIEF 2(PAR, 2015), the HI (Hollingshead, 2011), and the PRD. Data were collected electronically using SurveyMonkey, a web-based, internet survey tool.

Data collection efforts exceeded the derived sample size. The survey participants included one parent (88.57% were mothers; 11.42% respondents were fathers) who responded to the online survey questions in the Walden Parent Survey. The participants were parents of varied ethnicities including: 65.71% Black or African American, 22.86% White, 7.14% Hispanic or Latino, 2.86% Asian and 1.43% Other. Of the participants, 50% of the parents completed graduate level education and 52.86% of the study's sample of parent participants earned $100,000 or more per year. Parents reported that of the adolescents, 52.85% were 12 – 13 years of age, 45.71% students were 14 – 18 years of age, and 1.43 was Unknown; further, 57.14% were male and 42.86% were female.

Five research hypotheses were tested using a variety of statistical techniques. Preliminary data analysis involved the calculation of descriptive statistics such as the mean scores standard deviations, and measures of normality. Inferential analysis involved using the Pearson Product Moment correlation as well as simple linear and multivariate regression analyses. The statistical analysis strategy by research question and/or hypothesis supported three of the five hypotheses.

In Research Question 1, the results of both the Pearson bivariate correlation showed a moderate, negative association between high levels of parental supervision and low levels of deviant adolescent behaviors, which was statistically significant. The regression analysis also showed that high levels of parental supervision (tracking and surveillance) predicted deviant adolescent behavior in middle and high school students.

In Research Question 3, the results of a Pearson bivariate correlation showed a significant, negative association between parental monitoring and deviant adolescent behavior. However, the regression analysis was not statistically significant. This research finding suggested that while high levels of parental monitoring were associated with low levels of deviant adolescent behaviors, parental monitoring did not predict deviant adolescent behavior in middle and high school students.

Finally, in Research Question 4, the results of a multiple linear regression analysis showed that at high moderation, self-control influences the relationship between parental supervision and deviant adolescent behavior. Self-control was found to be a significant moderator of the relationship between high levels of parental supervision (tracking and surveillance) and deviant adolescent behavior.

The statistical analysis strategy (MRC) by research question and/or hypothesis supported three of the five hypotheses in this research study. Chapter 5 will present the interpretation of these findings. The limitations of this research study, recommendations for continued research in this area, as well as positive social change implications of these findings will also be discussed in the final chapter

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this study, I aimed to explore the relationships between parental supervision and monitoring and deviant adolescent behavior as moderated by certain psychological and social factors in middle and high school students. There were significant gaps in the literature that failed to explain the interplay between the various psychosocial factors (e.g., parenting practices and self-control in children) and deviance in adolescence. There was a need for models of parenting and child behavior that offer more specificity regarding the processes that underlie these relationships. To facilitate a better understanding of this critical stage of adolescent development, in this quantitative study, I explored the relationships between parental supervision and monitoring as moderated by two underlying psychosocial factors, self-control and SES, in middle and high school students.

One key finding in this quantitative research study was found in Research Question 1. Pearson bivariate correlation results showed a negative association between high levels of parental involvement (tracking and surveillance) and deviant adolescent behaviors, which was statistically significant. The regression model was also statistically significant, which showed a significant predictive relationship between high levels of parental supervision (tracking and surveillance) and deviant adolescent behavior. High levels of parental supervision (tracking and surveillance) were associated and predicted low levels of deviant adolescent behaviors in middle and high school students.

Another key finding in this quantitative research study was found in Research Question 3. Pearson bivariate correlation results showed a negative correlation between parental monitoring (e.g., allowing for greater autonomy) and deviant adolescent behavior, which was statistically significant. However, the results of the linear regression analysis were not significant. While high levels of parental monitoring were associated with low levels of deviant adolescent behavior, one did not predict the other. There was a significant, negative association between high levels of parental monitoring and low levels of deviant adolescent behaviors in middle and high school students.

Another key finding in this research study was found in Research Question 4. At high moderation, the results of a multiple linear regression analysis identified self-control as a significant negative moderator of the relationship between high levels of parental supervision (tracking and surveillance) and deviant adolescent behavior in middle and high school students. At the high level of moderation, self-control influences the relationship between high levels of parental supervision and deviant adolescent behavior.

Interpretation of the Findings

The current cross-sectional, survey data revealed statistically significant relationships between parental supervision and monitoring and deviant adolescent behaviors in middle and high school students. Further, the current research showed that self-control was a significant moderator of the relationship between parental supervision and monitoring and deviant adolescent behavior in middle and high school students.

Given these findings, the current research offers strong support for social learning theory and extends the knowledge in the social sciences.

A cross-sectional study typically cannot establish cause and effect; therefore, it is beyond the scope of this study to report that there was a direct causal relationship between parental supervision and monitoring and deviant adolescent behaviors in middle and high school students. However, results of this research confirmed the findings of Akers and Jensen (2013), who indicated that quantitative models of social learning variables are appropriate for assessing social learning theory because the independent variables in this process have been hypothesized as causally linked to deviant behavior. These authors noted that social learning theory will be supported by cross-sectional, survey data even though the data may not fully reproduce the underlying processes (Akers & Jensen, 2013). They contended that if the theory was correct, then multiple regression sets of analyses of variables consistent with the theory that approximate the underlying process should be supported by the data given the proper statistical analysis (Akers & Jensen, 2013). They noted that the stronger the observed relationship, the more support for the theory while weak relationships may serve to disconfirm the theory (Akers & Jensen, 2013). The current research served to confirm social learning theory as causally linked to deviant behavior.

The current research showed that high levels of parental supervision (tracking and surveillance) were associated with and predicted low levels of deviant adolescent behaviors. Social learning theory does not confine itself to theories of cultural deviance

or other explanations of deviance as a culture that values delinquency. Social learning theory proposes and the research showed that individual differences in behavior (e.g., self-control) can be best explained by past and current exposure to both conforming and nonconforming patterns and values. Further, this theory suggests that families are the primary group in this process and that conforming and/or nonconforming tendencies have already developed based on the functions of previously learned patterns of behavior within the family.

The research data showed that at high moderation, self-control significantly influenced the relationship between parental supervision and deviant adolescent behavior. The results supported social learning theory as a dynamic process that includes both reciprocal and feedback effects and also supported the principle that behavior can be differentially reinforced by its consequences (see Akers, 1985). In the current study, I employed a psychosocial model in conjunction with social learning theory to help demonstrate how the underlying factor of self-control moderated the relationship between parental supervision and monitoring and deviant adolescent behavior (see Figure 1). This research revealed that high levels of parental supervision (tracking and surveillance) was associated with and predicted low levels of deviant adolescent behavior and that self-control moderated this relationship.

The findings of this research study did not support the results of Keijsers et al. (2012), who suggested that parental prohibition and disapproval of friendships (which were even more controlling parental behaviors than tracking and surveillance) indirectly

predicted higher levels of adolescent delinquency. Keijsers et al. suggested that parental prohibition can actually push children into the company of delinquent friends. Keijsers et al. suggested that such "overly controlling and autonomy restrictive" parental practices may result in a mismatch between the adolescent's need for autonomous decision making and the parent's efforts to regulate the adolescent's decisions. They also considered the premature autonomy perspective and suggested that parental control may occur in response to deviance in adolescence (Keijsers et al., 2012). However, this bidirectional perspective was not substantiated by Keijsers et al.'s (2012) findings.

On the contrary, in the current research study, I showed that while high levels of parental supervision (tracking and surveillance) was associated with and predicted lower levels of delinquency in middle and high school students, this form of parenting was less invasive than Keijsers et al.'s (2012) description of "overly controlling and autonomy restrictive" parental practices. Further, the current research revealed a significant inverse association between parental monitoring (greater autonomy) and low levels of deviant adolescent behavior but one did not predict the other. Moreover, I showed that there was an underlying psychosocial factor, self-control, that helped to explain the interplay between parental supervision and monitoring and deviant adolescent behavior. The current research findings suggest that self-control is a significant moderating factor that influences the strength of the relationship between parental supervision and deviant adolescent behaviors. At high levels of moderation, self-control influences parental supervision and deviant adolescent behavior in middle and high school students,

according to the parental report. In the current research, I offer support for the psychosocial model presented in Figure 1 of the bidirectional perspective that parental supervision (tracking and surveillance) may have also been the result of deviant adolescent behavior.

Further, the findings extended the knowledge in the discipline as it supported the behavioral principles as I applied social learning theory and used a visual, psychosocial model of the dynamic process that involves both reciprocal and feedback effects (see Figure 1). I also used a conceptual framework to create a developmental model of the psychological (e.g., self-control) and social factors (e.g., SES) that were believed to interact and explain both adaptive and maladaptive functioning across adolescence. Sameroff (2010) noted that depending on the family or other self-regulating systems involved with the adolescent, "desires for autonomy or intimacy can be fostered or thwarted," which can have significant impact on the adolescent's future adaptive or maladaptive functioning (p. 19).

This psychosocial model (see Figure 1) also showed a bidirectional view of parent-child relations. Specifically, it attempted to demonstrate that child-rearing characteristics (e.g., parental supervision and parental monitoring) influences or are influenced by delinquency and/or by other moderating problem behaviors of the child (e.g., self-control). It is unclear which one precedes the other; however, failure to take-into account these intraindividual "child effects" (e.g., self-control) can cause an overemphasis on the effects of parenting on delinquency (Gault-Sherman, 2012; p. 122).

It was beyond the scope of my research to suggest that high levels of parental supervision and monitoring caused a lack of self-control or that a lack of self-control caused deviant adolescent behaviors in middle and high school children; however, I found that one does in fact influence the other. This model was featured because it demonstrated that the intraindividual psychological factor of self-control moderated the effects of parental supervision and deviant adolescent behavior.

Limitations of the Study

Given that a random sample of parents was not studied, the generalizability of these results is limited. The generalizability to other school districts in other states with different sets of rules and regulations is also a limitation of the current study. Further, objective measures were used, which contained validity checks to report methodological weaknesses in the study.

Another predicted limitation was that parents would present their children in a more positive light than they truly exhibit. In fact, the participation of parents whose children had actually committed deviant adolescent behaviors in the home, school, and/or community was found to be a significant limitation of this study. Rather, I found that of the parents who responded, their children had not engaged in serious deviant adolescent behaviors, were involved in school-related extracurricular activities, and/or were responsible enough to take home the written information to their parents to participate in the study. These parents were very forthcoming and reported having first-hand knowledge of their adolescent's behaviors as their adolescents were typically supervised

and monitored very closely by these parents. Further, parent completion of the survey was an indication of their willingness to participate openly and truthfulness in responding.

Recommendations

The participation of parents whose children had actually committed deviant adolescent behaviors in the home, school, and/or community was also found to be a significant limitation of this study. Several efforts were made to include the parental participation of students placed in alternative schools, students in transitional programs for behavioral concerns, as well as students who had been identified as having behavioral disabilities through special education programs. The assumption of normality data for parent reports of deviance in this research study was skewed as there were only minor deviant adolescent behaviors reported (e.g., disrespect, theft) in the adolescents studied. No serious acts of deviance were reported (e.g., assault, drug use). Future research should seek to include students enrolled in alternative programs and placements including juvenile detention centers in order to get a better picture of the intra-individual or psychosocial factors that contribute to deviant adolescent behavior.

While SES was initially believed to have moderated the relationship between parental supervision and monitoring and deviant adolescent behavior, the current findings did not substantiate this finding. The current study demographics showed that 50% of the parent participants had a graduate level education and that 54% earned over $100,000 per year. Whereas, Rekker et al. (2015) found that youth were more likely to offend when

their family SES was lower than when the family SES was higher. They found that the same youth are more likely to commit moderate and serious delinquency during those years when family SES is lower than when family SES is higher. They also found within individual changes in parenting to be related to minor delinquency. Youth were more likely to commit minor offenses during years in which they spent less time with parents and in which parents knew less about their activities (Rekker et al., 2015). These findings suggested that such family factors related to parenting and lower SES may have a direct effect on adolescent delinquency. More research is needed on the role of lower SES as it relates to parental supervision and monitoring and deviant adolescent behavior in middle and high school students. Future research aimed at identifying specific indicators of SES as well as other sociocultural factors that contribute to delinquency such as parental characteristics, family history, and family income is needed.

The current research study suggested that high levels of parental supervision (tracking and surveillance) were associated with low levels of deviant adolescent behaviors and actually predicted them. It also found a moderate negative correlation between high levels of parental monitoring (which allows for greater autonomy) and low levels of deviant adolescent behavior; however, one did not predict the other. To the contrary, the research literature suggested that youth who are given excessive freedom and unsupervised time, a process known as premature autonomy, are at significant risk of poor outcomes including escalation in substance use, delinquency, violence in adolescence, high risk sexual behavior, and aggression towards a partner (Dishion.

Nelson, & Bullock, 2004; Lansford et al., 2014). The research suggested that premature behavioral autonomy leads to a possible chain of events including engagement in deviant behavior, identity struggles, and lower planfulness, which leads to later lower educational attainment and maladjustment in the work domain. Premature autonomy or the early timing of certain developmental tasks in adolescence may be associated with risks that extend well beyond adolescence into young adulthood. Subsequent studies are needed to further clarify the parenting practice of premature autonomy and other underlying psychosocial factors that may be associated with and/or predict deviant adolescent behaviors in middle and high school students.

Implications

Positive Social Change

Adolescence is a developmental stage marked by the influence of certain moderating psychological (e.g. self-control) and social changes (e.g., increased peer interactions). It is an important time developmentally as adolescents are experiencing new stresses including increased autonomy and peer influences (Trudeau et al., 2012). It is also a time for the beginning of certain developmental outcomes for adolescents including achievement, autonomy, identity, intimacy, psychosocial adjustment, sexuality, responsibility, and for accepting consequences for one's own actions. If these developmental outcomes are not achieved successfully, the adolescent may experience developmental crises, which can cause maladjusted functioning such as deviant adolescent behavior (Erikson, 1963).

The period of adolescence is often a difficult transitional period with vulnerabilities to certain psychological and environmental influences and has the potential for either adaptive growth or risk for maladaptive outcomes (Calkins, 2011). A psychosocial model was used in the current research study as a conceptual framework that showed the reciprocal interaction between the psychological and social factors that contribute to both normal and atypical adolescent development. A psychosocial model of deviant adolescent behavior was shown in *Figure 1*.

Over the years, several research studies have demonstrated that the main cause of self-control is effective parenting practices (Meldrum et al., 2012). This research has been interpreted largely from a "parenting effects" perspective, where the socialization practices of parents influences the development of a child's level of self-control. Meldrum et al. (2012) noted that there is a preponderance of literature that examines the relationship between parenting and self-control but that there is little attention paid to the influence of self-control on parenting. Meldrum et al. (2012) suggested a "child's effects" perspective, where the self-control of a child influences parental socialization – that is a child with high self-control as evidenced by low levels of externalizing and internalizing behaviors will experience more positive parenting including attachment and consistent monitoring and discipline. These authors suggested that early parental socialization practices influenced the development of self-control and adjustment in children. This combination of characteristics forecasts low levels of behavioral and emotional

difficulties and low levels of deviant adolescent behaviors during adolescence and young adulthood (Brody et al., 2002).

On the other hand, it is presumed that children who are impatient, impulsive, and restless are more difficult to care for as they demonstrate low self-control. These children tend to provoke more frustration, hostility, harsh or erratic discipline, and inconsistent monitoring from their parents. It is believed that such ineffective parenting also influences self-control. This "child effect" may also shape a child's later interactions with parents and thus may also better explain the effects of parenting on deviant adolescent behavior.

While self-control is not presumed to be the only moderating mechanism between parenting and deviance, this psychological factor was examined closely in this study. Few studies have examined the bidirectional effects of the dynamic, interactive relationship between parenting and deviance and is a gap in the literature. Failure to consider these effects and other psychosocial factors that contribute to deviant adolescent behavior limits our understanding of this developmental process.

Family prevention and intervention services designed to strengthen the protective factors (e.g., parental supervision and self-control) that encourage adaptive growth and reduce the risk factors (e.g., deviant peer associations) for maladaptive behaviors are needed. Such services may include parent education classes, parent advocacy and support programs, and parenting strategies and solutions for raising children and youth.

Comprehensive, multimodal programs that are designed to address multiple behaviors that involve individuals, families and communities are needed (Eddy et al., 2015).

Likewise, social-emotional learning programs for children and adolescents whether in school or in the community designed to strengthen the protective factors (e.g., development of self-control) in children and adolescents are needed. Such programs may include supportive mentoring, therapeutic, recreational, and/or educational supports, which will in effect, serve to reduce risk factors. By focusing social-emotional prevention/interventions on children and adolescents, we are more likely to produce significant reductions in deviant adolescent behaviors and encourage significant improvements in their individual developmental outcome and in their family functioning.

Conclusions

Further, in psychological practice, family dynamics should be observed carefully and studied methodically in order to consider the bidirectional effects of the interactive relationship between parenting and deviant adolescent behaviors in order to bring about effective social change. Recommendations for practice may include large scale research studies on structured, videotaped parent-adolescent interactions for purposes of identifying the causes and effects of this understudied area of the developmental process of adolescence. More research is needed on parenting practices and adolescent development in order to produce significant reductions in deviant adolescent behaviors and to encourage improvement in the developmental outcomes for these adolescents and their families.

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Appendix A: Permission to Conduct Survey Research Project

Greetings Dr. Sunmonu,

I am a doctoral student at Walden University working on my dissertation proposal. I am planning to conduct an online, survey research study that explores the association between parental supervision and monitoring and deviant adolescent behaviors. I am particularly interested in learning whether or not certain intrapersonal, psychosocial factors including self-control and socioeconomic status may moderate this parent-deviance association. This study partially fulfills the requirements for earning my doctorate degree in clinical psychology. Uncovering the processes that contribute to deviant adolescent behaviors can provide an important contribution to future prevention research.

I would like to request your permission to invite the parents of middle and high school students to participate in this confidential, online survey research study. I propose to coordinate efforts with local middle and high school Principals to share written information in the form of a Parent Letter and a Survey Research Announcement with the parents of middle and high school students. Finally, I propose to provide feedback information regarding the interpretation of any significant data to the local educational agency in order to inform and to effect social change.

Parents are eligible to participate if they: (1) are over the age of 18 years and (2) have a child in the local school district who has ever engaged in behavior that resulted in disciplinary action whether at home, in school, or in the community. Their participation

in this study is completely voluntary, and they may withdraw from the study at any time. As part of their participation, they will be asked to complete the online survey that consists of several questions. The entire process will take approximately 45 minutes to complete. Informed Consent for participation will be obtained at the time of their initiation of the online survey and/or will be implied by the submission of the completed online survey. Parents will be given my email address as the principal researcher in order to write to ask questions directly if necessary. A password protected link to the survey will be provided to qualified parent participants to complete the online survey. Parents will be able to complete the online survey at home or at work at their convenience, save it, return to complete it as needed, and submit it to me directly in return.

The data gathered from the research will be used only for this research purpose. There will be an opportunity for parents to comment, which may provide useful information to the school district as well.

If you will grant me the permission to conduct this online survey research with your parents, or if you have any questions or concerns, please contact me at XXX@waldenu.edu or please feel free to call me directly at (XXX)XXX-XXXX. I greatly appreciate your time and assistance in this matter.

Regards,

Mary Ross-Gray

Walden University

Clinical Psychology PhD Program

Third Party Research Information

Show all 4 attachments (2 MB) Download all

Save all to OneDrive - Laureate Education

Action Items

Sent on Behalf of Dr. Kolawole K. Sunmonu, PhD.

Please see the attached information regarding PGCPS's Third Party Research application review process. *Applications are accepted from July 1 through April 30 of each school year*. It usually takes up to thirty (30) working days to complete the application review. Sometimes we are able to complete the review a little earlier but it all depends on what our office is working on at the time. The sooner you turn it into us the better. Please be aware that using staff or students at the school/office you are currently working at would be considered a conflict of interest.

Do not hesitate to contact me if you have any questions. I look forward to working with you.

Regards,

Kimberly A. Hopkins

Administrative Assistant

Department of Research & Evaluation

Prince George's County Public Schools

Appendix B: Parent Invitation to Participate in a Research Project

Dear Parent,

I would like to invite you to participate in an important research study on adolescent behavior. I am a graduate student at Walden University. This study partially fulfills the requirements for earning my doctorate degree (PhD) in clinical psychology. I am conducting **an online, survey research study that explores the association between parental supervision and monitoring and adolescent behaviors.** I am particularly interested in learning whether or not certain other intra-personal factors including self-control and socioeconomic status are also related to this parent-adolescent association. Uncovering the processes that contribute to adolescent behaviors may provide an important contribution to future prevention research and intervention.

Parents are eligible to participate if they: (1) are over the age of 18 years; (2) have a valid email address; and (3) have a child in the local school district who may have ever engaged in any behavior that resulted in disciplinary action whether at home, in school, or in the community. Your participation in this study is completely voluntary, and you may withdraw from the study at any time. However, please note that only completed surveys will be included in the final research. As part of your participation, you will be asked to complete the anonymous online survey that consists of several brief questionnaires. Some of the questions may contain very sensitive information, but will not require you to disclose any specific information about the behavior your child was involved in. The data gathered from this research will be kept strictly confidential in and

will only be used for this research purpose. The entire process will only take approximately 45 minutes of your time to complete at home or work, at your convenience. While there is no compensation for your participation, there will be an opportunity for parents to contribute to this important research on adolescence. The findings of this study will also be made available upon request.

If you have any questions or concerns, **please contact XXX@waldenu.edu** or you may contact my Dissertation Chairperson, at XXX@waldenu.edu. **To participate now, please click on the following link to begin the online survey**:

https://www.research.net/r/WaldenParentSurvey

I greatly appreciate your time and assistance in this worthwhile study.

Regards,

Mary Ross-Gray

Doctoral Student Researcher

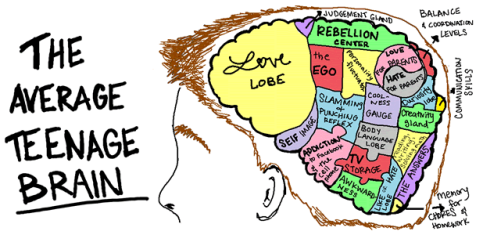
Walden University

Appendix C: Survey Research Announcement

Do you have concerns about **your teen's behavior**? **Yes** **or** **No**

Would you like to learn more about these behaviors and how **parenting skills** may be contributing to these behaviors? **Yes** **or** **No**

Would you like to learn more about the other individual characteristics related to these types of **behavior problems in local teens today**? **Yes** **or** **No**



If you answered **Yes** to any of these questions, please don't hesitate to go online to participate in an important survey. You can participate in this important survey research about the growing behavior problems in local teens today by clicking the link to access the survey directly or by entering https://www.research.net/r/WaldenParentSurvey in your web browser. Your participation in this survey would be greatly appreciated.

Appendix D: Permission to use the Parental Supervision Measure

Dear Dr. Greenberg,

My name is Mary Ross-Gray and I am a Ph. D clinical psychology student at Walden University. I live in Maryland and I am currently working on my dissertation. The purpose of this letter is to ask for your permission to use your Parental Supervision Measure as one of my measuring instruments in my dissertation. My study is exploring the association between parental supervision and monitoring on deviant adolescent behaviors. I am particularly interested in learning whether or not certain intrapersonal, biopsychosocial factors including executive functioning, self-control, and socioeconomic status may moderate this parent-deviance association.

I will greatly appreciate your help and corporation in getting permission and gaining access to your scale. I am also interested in gaining more information about the reliability and validity of the measure. I can be reached at this email address: XXX@waldenu.edu or via phone XXX.

Regards,

Mary Ross-Gray

Walden University

Clinical Psychology PhD Program

From: Mark T. Greenberg, <XXX@psu.edu>

Date: January 9, 2016

To: Mary Ross-Gray <XXX@walden.edu

Subject: Permission to use Parental Supervision Measure

Hi Mary

I am forwarding your email to Melissa Lippold who can send you this measure.

Best

Mark

Mark T. Greenberg Ph.D.

Bennett Chair of Prevention Research

From: Mellisa Lippold, <XXX@email.unc.edu>

Date: January 11, 2016

To: Mary Ross-Gray XXX@aldenu.edu

Subject: Permission to use Parental Supervision Measure

Hi Mary,

Thank you for your interest in our work.

Our supervision measure in the PROSPER project used two questions.

Both were on a 1-5 Scale where Always=1 to Never=5

Thinking of your child in the study, how often...

Is an adult home when your child gets home from school? (reverse scored)

Does your child get home from school before either you or your spouse/partner are home?

You may also want to look at the measures on the Fast Track Website. There are some scales on that project that I believe may have included more items.

Best wishes,

Melissa

Appendix E: Permission to use the Supervision – Primary Caregiver Instrument and the Parental Report on Child Delinquency Instrument

Dear Dr. Greenberg,

My name is Mary Ross-Gray and I am a Ph. D clinical psychology student at Walden University. I live in Maryland and I am currently working on my dissertation. The purpose of this letter is to ask for your permission to use the Supervision - Primary Caregiver and the Parental Report on Child Delinquency survey instruments as found on the Fast Track Project website as two of the measuring instruments in my dissertation. My study is exploring the association between parental supervision and monitoring on deviant behaviors. I am particularly interested in learning whether or not certain intrapersonal, biopsychosocial factors including executive functioning, self-control, and socioeconomic status may moderate this parent-deviance association. I will greatly appreciate your help and cooperation in obtaining expressed permission to use your scale. I can be reached at this email address: XXX@waldenu.edu or via phone XXX.

Regards,

Mary Ross-Gray

Walden University

Clinical Psychology PhD Program

from: **MARK T GREENBERG**
<XXX@psu.edu>

to: Mary Ross-Gray
<XXX@waldenu.edu>

date: Mon, May 2, 2016 at 9:22 AM

subject: Re: Fast Track Project

mailed-by: psu.edu

HI Mary

Thanks for your email. This reply gives you permission to use these scales in your dissertation.

best of luck

Mark

Mark T. Greenberg Ph.D.

Bennett Chair of Prevention Research

Visit our website: http://www.prevention.psu.edu

This research is based in part on data from the study entitled ["Fast Track," or "Multi-Site Prevention of Adolescent Problem Behaviors," or "Multisite Prevention of Conduct Disorder"], supported by **National Institute of Mental Health (NIMH)** Grants R18 MH48043, R18 MH50951, R18 MH50952, R18 MH50953, and R01 MH62988. The **Center for Substance Abuse Prevention** and the **National Institute on Drug Abuse** also have provided support through a memorandum of agreement with the NIMH. **Department of Education Grant** S184U30002 and NIMH Grants K05MH00797 and K05MH01027 also supported the study. The study was designed by the **Conduct Problems Prevention Research Group**, which currently includes, in alphabetical order, Karen L. Bierman, Pennsylvania State University; Kenneth A. Dodge, Duke University; Mark T. Greenberg, Pennsylvania State University; John E. Lochman, University of Alabama; Robert J. McMahon, Simon Fraser University; and Ellen E. Pinderhughes, Tufts University.

Appendix F: Permission to use BRIEF 2 Parent Screening Form

From: Mary C. Ross-Gray [mailto:XXX@waldenu.edu]

Sent: Monday, June 19, 2017 4:16 PM

To: Vicki McFadden <XXX@parinc.com>

Subject: Permission Licensing Application (PDF)

From: Vicki McFadden

Sent: Monday, June 19, 2017 4:31 PM

To: 'Mary C. Ross-Gray' <XXX@waldenu.edu>

Subject: Request: License Agreement for BRIEF Parent *Ross-Gray

Dear Mary Ross-Gray,

Thank you for your interest in the BRIEF!

The BRIEF2 released in November 2015. PAR and ethical guidelines recommend use of the current version in all new research and clinical use. More information about the BRIEF2 can be found at:

http://www4.parinc.com/Products/Product.aspx?ProductID=BRIEF-2.

Is there a reason that you prefer to use the original BRIEF and BRIEF-SR in your research? Please clarify.

What online survey platform do you plan to utilize? i.e. Survey Monkey, Qualtrics, REDCap, etc.

PAR will not grant permission to include an entire test or scale in any publication, including dissertations and theses. However, the inclusion of 3 sample items may be approved.

I look forward to hearing from you.

Best Regards,

Vicki McFadden

Permissions Specialist

From: Mary C. Ross-Gray

Sent: June 20, 2017, 12:42 PM

To: Vicki McFadden <XXX@parinc.com

Subject: BRIEF 2 Permission and Licensing

I'm interested in obtaining permission to use the BRIEF-2 Parent Screening Form for approximately 100 online survey participants. What exactly will I need to purchase and how much would it cost me? Please advise.

Mary Ross-Gray

XXX@waldenu.edu

RE: Request: License Agreement for BRIEF2 Parent, Screening Form *Ross-Gray

From: Vicki McFadden <XXX@parinc.com>

Sent: June 21, 2017, 9:23 AM
To: Mary Ross-Gray
Mary,

We are happy to consider granting you permission to administer the BRIEF2 Parent Screening online, however, we have a minimum license fee of $250.00 to administer our tests online.

The royalty/license fee for 84 administrations of the BRIEF2 Screening is $151.20 ($1.80 per administration for 84 administrations - this fee includes a 40% graduate student discount), but you would be required to pay the $250.00 minimum fee. If you wish, we can maximize your funds and allow for 138 administrations of the test online for the $250 fee. The administrations can only be used in this research project. *Pricing is valid until the end of 2017.

Your permission request form indicates that you do not already have a copy of the test. We would require you to purchase the manual for the instrument separately. This manual would include administration and scoring instructions, reliability and validity studies, and additional information about the instrument. You can also request a sample copy of the published test protocol at no additional charge with the purchase of the manual. **You will need the sample of the instrument in order to put the test online.

PAR does offer a graduate student discount on the purchase of published materials (form attached). Please note that this form must be faxed or mailed to PAR due to the signature requirements. Pricing information can be found at: http://www4.parinc.com/Products/Product.aspx?ProductID=BRIEF-2#Items. *Make sure to request a sample copy of the protocol (**specify Parent Screening**), since the Manual does not automatically come with one.

**Please note that you will be required to purchase the materials before PAR will enter into a License Agreement to have the BRIEF2 online. Once you have purchased the BRIEF2 materials, please let me know if you would like to proceed with the License Agreement for 84 (or 138) administrations of the test. Payment of the licensing fees is separate from your purchase of the Manual/sample.*

I look forward to hearing from you.

Sincerely,

Vicki McFadden

Permissions Specialist

Appendix G: Permission to use Hollingshead Four Factor Index of Social Status

Subject: Hollingshead Four Factor Index of Social Status

From: Mary C. Ross-Gray

Sent: Mon 6/19, 1:54 PM

To: XXX@yale.edu

Dr. Smith,

I am a doctoral student at Walden University. I am currently working on my dissertation and would like to obtain permission to use the Hollingshead four factor index to measure socioeconomic status. I am not sure who or where to get authorization to use the instrument. I read the 2011 issue of the Yale Journal of Sociology and noticed that Hollingshead (1975) was reprinted. Would you be kind enough to direct me to the right person or publisher of the instrument (if there is one)?

Also, if you can provide more information on the scales themselves, the code systems originally used to develop them and any more recent classifications of education, occupational attainment, etc., it would be greatly appreciated.

Thank you for your anticipated cooperation.

Mary Ross-Gray

Walden University

Clinical Psychology PhD Program

XXX@waldenu.edu

SECOND ATTEMPT

Subject: Hollingshead Four Factor Index of Social Status

From: Mary C. Ross-Gray

Sent: Mon 6/24, 4:26 PM

To: XXX@yale.edu

Dear Dr. Smith,

I am a doctoral student at Walden University. I am currently working on my dissertation and would like to obtain permission to use the Hollingshead four factor index to measure socioeconomic status. I am not sure who or where to get authorization to use the instrument. I read the 2011 issue of the Yale Journal of Sociology and noticed that Hollingshead (1975) was reprinted. Would you be kind enough to direct me to the right person or publisher of the instrument (if there is one)?

Also, if you can provide more information on the scales themselves, the code systems originally used to develop them and any more recent classifications of education, occupational attainment, etc., it would be greatly appreciated. I am sure I will benefit from as much information as you can provide. However, the most pressing issue is for me to be sure that I can use the instrument without any legal problems (copyright, permission

to use, any other problems resulting from attaching the instrument to the appendix of my dissertation). Please advise.

Thank you for your anticipated cooperation.

Mary Ross-Gray

Walden University

Clinical Psychology PhD Program

XXX@waldenu.edu

THIRD ATTEMPT

Subject: Hollingshead Four Factor Index of Social Status

From: Mary C. Ross-Gray

Sent: Sun 7/30/2017 9:25 PM

To: philip.smith@yale.edu; XXXy@yale.edu

To Whom It May Concern,

I am a doctoral student at Walden University. I am currently working on my dissertation and would like to obtain permission to use the Hollingshead four factor index to measure socioeconomic status. I read the 2011 issue of the Yale Journal of Sociology and noticed that Hollingshead (1975) was reprinted. I am not sure who or where to get

authorization to use the instrument. Would you be kind enough to direct me to the right person or publisher of the instrument (if there is one)? The most pressing issue is for me to be sure that I can use the instrument without any legal problems (copyright, permission to use, any other problems resulting from attaching the instrument to the appendix of my dissertation). Please advise.

Thank you for your anticipated cooperation.

Mary Ross-Gray

Walden University

Clinical Psychology PhD Program

XXX@waldenu.edu

From: philip.smith@yale.edu <XXX@yale.edu>

Sent: Monday, July 31, 2017 7:21 AM

To: Mary C. Ross-Gray

Subject: Re: Hollingshead Four Factor Index of Social Status

Yes you have my permission to use and reproduce this free of charge. Thank you for asking Mary.

Philip Smith (Chair, Yale Sociology).

Sent from my iPhone