7-22-2011

Parenting Styles and Criminal Involvement: A Test of Baumrind's Typology

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PARENTING STYLES AND CRIMINAL INVOLVEMENT:

A TEST OF BAUMRIND'S TYPOLOGY

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Philosophy

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August 2011

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Title: Parenting Styles and Criminal Involvement: A Test of Baumrind's Typology

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The current study sought to examine the relationship between perceived parenting styles and level of criminal involvement. Baumrind's typology of parenting styles is based on research conducted approximately 40 years ago (Baumrind, 1967, 1971, 1972; Baumrind & Black, 1967). Despite its longevity in the social sciences, the typology has enjoyed limited empiricism in the field of criminology.

Four parenting styles form the crux of Baumrind's typology. These four styles: authoritarian, authoritative, neglecting/rejecting, and permissive parenting are defined by the level of demandingness and responsiveness that parents display. This study provided an in-depth examination of demandingness, responsiveness, and the four parenting styles that their convergence creates. Prior empirical research examining the effects that parents' parenting styles have on their children is assessed.

A methodology was devised that allowed the researcher to study the perceptions of parenting styles and the impact that they had on subsequent deviant, delinquent, and criminal involvement among two different samples – county jails inmates and university students. University students were randomly selected to participate, were contacted via university email, and were asked to complete an online survey. A convenience sample of jail inmates was asked to complete a paper copy of the same survey.

The results from this study suggest that the permissive parenting style is the least problematic and that those parented by permissive parents are less likely to engage in acts of deviance, delinquency, and crime. Not surprisingly, respondents parented by neglecting/rejecting parents were more likely to report engagement in deviant, delinquent, and criminal acts. Meanwhile, the authoritarian and authoritative parenting styles predicted very few behaviors. No matter one's distinction (college student or county jail inmate; female or male; non-white or white), the style by which one was parented is predictive of behavior.

ACKNOWLEDGEMENTS

In this acknowledgment section I would like to thank the individuals who helped me through the dissertation; I also would like to thank those who have been there for me throughout this entire four-year process. First, I want to thank my family for their unconditional support. My parents – Jaci and Curt – and my grandparents – Joanne and Ray – have always encouraged me to follow my dreams and set my goals high. Words cannot express how much their guidance and love has meant to me throughout my life. I also want to thank my younger brothers Shaun and Joshua for all of their brotherly love. Shaun is a writer and Joshua is a musician – both of them are going to do great things.

Next I would like to thank my dissertation chair, Dr. Jamie Martin. Jamie has been working with me on this project in one capacity or another for the past three years beginning when it was simply an idea for an independent study. Her expertise, attention to detail, and time investment cannot be understated. Without her guidance, not only would this project not be completed, but it also may never have even come to fruition. Jamie, thank you for your help with this project and for being a great mentor.

I also would like to thank my dissertation committee. Dr. Kate Hanrahan, Dr. Jen Roberts, and Dr. John Lewis all provided ideas for improving this project and caught many mistakes that I made while working on it, and in many ways laid the groundwork for my ability to complete it. I wrote my first research proposal as a student in Kate's qualitative class and I created my first survey instrument as a student in 901 with Jen. The skills that I learned from each were necessary for the completion of this project. Without John, I may still be testing countless hypotheses and without all three I may have started an unwanted war of words with a

couple of pre-eminent criminological theorists. Kate, Jen, and John: thank you for working with me on this project and for always having an open door when I needed to chat about something.

There are a couple of other faculty members who I would like to thank. First, I would like to thank Dr. Dave Myers. Dave was doctoral coordinator when I first arrived and really sold the program to me when I was deciding what school to attend. He also gave me the opportunity to work on the editorial staff of *Criminal Justice Policy Review*, which allowed me to learn how the peer-review process works. Dave, thank you for all of the opportunities that you have given me over the past four years and for being a great boss in the process. Next, I would like to thank Dr. Dan Lee. Dan has been a sounding board for me, both professionally and personally, for four years; actually, I think I wore a rut in the carpet between our offices with my constant trips back and forth. Dan, I cannot thank you enough for sharing your time, insight, and expertise.

In addition, I would like to thank every other faculty member for believing in my ability to teach and giving me the opportunity to do so during the past two years, and for always being available to answer a question or have a conversation. I would like to thank Christoph Meier, who helped me in the early stages of my pre-test when he was the director of the Applied Research Lab. I would be remiss if I did not thank Ms. Dottie Hillard and Mrs. Karen Lemasters for all of the things that they have helped me with. I always had a mundane question about paper or office supplies for Dottie, but she always helped me with a smile on her face. Karen was always tremendous in her role as doctoral secretary, but she also helped *CJPR* immensely (thanks for the awesome pens, Karen).

Next, I would like to thank my cohort. I'm not sure how far I would have made it without James Bowers, Jenni Huck, and Kendra Bowen. On the professional side, thank you for exhibiting a level of discipline and dedication that I knew I would have to match if I wanted to

stick around and for being supportive through qualifiers, TA/Temp applications, real job applications, and the dissertation. On the personal side, thank you for being my first group of friends in Indiana, for the game nights at Jenni's house, flashback Friday's at James' house, Thanksgiving dinners at Kendra's house, and quirky road trips (be it to the Cheesecake Factory or home from Cincinnati or waiting for flights in St. Louis). We have been through a lot already and I hope we can maintain personal and professional ties as we branch out across the country.

I would like to thank a group of individuals who have provided unlimited support during the past few years; essentially, I consider these three people my best friends (and obviously more in one instance): Maddie Ursitz (the one instance), Steven Brewer, and Brian Iannacchione. Words really cannot express how much each of them mean to me and I do not have enough time to recount all of my favorite moments with them. But, they are all fans of *LOST*, so I want to share with them a passage from the closing moments of the series finale that sums up how I feel about them (and, if you are reading this without having viewed the finale of *LOST*, consider this a spoiler alert): "This is a place that you…that you all made together so that you could find one another. The most important part of your life was the time that you spent with these people. That's why all of you are here. Nobody does it alone…You needed all of them, and they needed you." Brian, thanks for your friendship. Maddie, thanks for more than that. Steve, thanks for your friendship and for all of the Qualtrics help early on.

I also would like to thank Phil Stinson. Phil showed me the ropes early on and continues to be a good friend. Additionally, without Phil's connections, I am not sure if I would have gotten into one of the correctional facilities that served as a research site in this study. Phil, thanks for all of your help over the years. Also, I would like to thank Mari Pierce and Diana Falco. They were in their third and fourth years when I arrived at IUP, but they took me under

their wing almost instantly. They provided guidance and friendship during my early years and continue to do so today. Thank you, Mari and Diana. Also a word of thanks to Brandon Stroup; you've been a good friend during our time here. Thanks also to my friend and roommate for the past four years, Jon Rezk, I couldn't have asked for a better living situation. And thanks to Max and Pippi, although they will never read this; I've probably told those two dogs things that I haven't told any people.

I would like to thank the administrators and staff members of the two correctional facilities that I gained access to, especially Carol, Lesley, Lance, and LaToya. Without their assistance half of this study would not have been possible. They were the epitome of professionalism and class. Additionally, I would like to thank everybody who completed the survey. Without their time and participation NONE of this study would have been possible.

Finally, to the one thing that I have spent the most time with over the past two years, this dissertation. Thank you, dissertation, for your looming presence and making me a better academic. When describing you, and I am fairly certain you will agree, I think Bruce Springsteen sums it up best with his immortal words to Mary in *Thunder Road*, "you ain't a beauty, but hey you're alright."

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CHAPTER I

INTRODUCTION

There exists a variety of criminological theories that attempt to explain the effects, both direct and indirect, that the family has on delinquent and criminal behavior. Hirschi (1969) theorized, among other things, that the bond between parent and child factored into that child's level of delinquency and criminality later in life. Building on this, years later Gottfredson and Hirschi (1990) suggested that poor parental management leads to low self-control in children, which leads to subsequent delinquent or criminal behavior. Integrated theories that explore the life-course of criminal behavior also have tried to explain the parent-child crime link. Moffitt (1993) suggested that juvenile delinquency is caused by neuropsychological vulnerabilities in children and socialization in a criminogenic environment. Simply, she meant that children with neuropsychological deficiencies who are born into criminal environments are more likely to succumb to deviant and delinquent behavior than those who are not born into those types of environments. Additionally, Moffitt theorized that the most significant predictor of problem behaviors in children is damaged neuropsychological functions, which are heritable; thus intimating a direct link from parent to child. Sampson and Laub's (1993) theory of age-graded social control, which integrated social control and learning theories, concluded that probability of delinquency increases when family bonds break down, thus supporting the basic tenets of Hirschi's (1969) social bond and Gottfredson and Hirschi's (1990) self-control theories.

While much has been done in the field of criminology to explore the parent-child crime link, the fact remains that the discipline is relatively young when compared to other social sciences and this link also has been the subject of in-depth investigation in other disciplines. As seen above, the link between parental attachment and support to delinquency and criminality has

been empirically tested and supported within the field of criminology. However, it is important to continue to explore, and seek to understand, the connection between parental behavior and delinquency and criminality in children. There are numerous empirically supported psychological theories of parenting, such as attribution theory and interaction theory, which have not received much scrutiny within the field of criminology.

One such psychological typology, Baumrind's (1966, 1996, 2005; also see Maccoby & Martin, 1983) typology of parenting styles, has received very little attention from those studying the effects that parenting style has on the level of delinquent and criminal behavior in adolescents and young adults (Hoeve et al., 2009). In 1966, Baumrind officially introduced the conceptual parenting style of "authoritative control" into the child development literature. Included with this concept were the ideas of authoritarian control and permissive control (Baumrind, 1966). This early examination of these three controlling behaviors represents the seminal typology of parenting styles (Buri, 1991; Simons, Simons, & Wallace, 2004). These styles can be explained best by examining the concepts that they are steeped in – demandingness and responsiveness (Baumrind, 1996, 2005; Maccoby & Martin, 1983; Simons et al., 2004).

The idea of demandingness is comprised of: direct confrontations between parent and child, parental monitoring of the child, and consistent parental discipline (Baumrind, 1996). The idea of responsiveness consists of: warmth, reciprocity, and clear communication and person-centered discourse (Baumrind, 1996). The convergence of demandingness and responsiveness results in four different parenting styles: authoritarian, authoritative, permissive, and neglecting/rejecting. Baumrind (1966) and Simons et al. (2004) discuss three of the different styles: authoritarian parents display high levels of demandingness and low levels of responsiveness; authoritative parents also display high levels of demandingness as well as high

levels of responsiveness; and permissive parents display low levels of demandingness but high levels of responsiveness. The neglecting/rejecting style, in which parents display low levels of both demandingness and responsiveness, emerged in later research (Baumrind, 1971, 1991, 2005). The purpose of the proposed study is to examine the effects that parenting style has on level of criminal involvement in young adults. As the seminal typology of parenting styles (Buri, 1991; Simons et al., 2004), it is unusual that it has not been used more often in the study of criminal behavior. This deficiency in the empirical literature provided justification for the current study.

The Current Study

Again, the purpose of this study was to determine what, if any, effects perceived parenting style has on the level of criminal involvement in adults. Much of the empirical research on Baumrind's typology has focused on anti-social behavior in children relative to parenting style (Barber, Olsen, & Shagle, 1994; Baumrind, 1967, 1971, 1972; Baumrind & Black, 1967; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Paulussen-Hoogeboom, Stams, Hermanns, Peetsma, & van den Wittenboer, 2008; Querido, Warner, & Eyberg, 2002; Vieno, Nation, Pastore, & Santinello, 2009), adolescent cigarette use (Chassin et al., 2005; Harakeh, Scholte, Vermulst, de Vries, & Engels, 2004; Huver, Engels, Van Breukelen, & de Vries, 2007; Jackson, Bee-Gates, & Henriksen, 1994; Jackson, Henriksen, & Foshee, 1998; Mott, Crowe, Richardson, & Flay, 1999; Simons-Morton, Haynie, Crump, Eitel, & Saylor, 2001), substance abuse (Baumrind, 1991), and alcohol use (Patock-Peckham & Morgan-Lopez, 2007). Likewise, a number of studies are devoted to delinquency (Avenevoli, Sessa, & Steinberg, 1999; Chambers, Power, Loucks, & Swanson, 2000; Hoeve et al., 2007; Jackson et al., 1998; Palmer & Hollin, 2001; Paschall, Ringwalt, & Flewelling, 2003; Simons, Simons, Burt, Brody, & Cutrona, 2005;

Stattin & Kerr, 2000; Steinberg, Blatt-Eisengart, & Cauffman, 2006; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994; Steinberg, Mounts, Lamborn, & Dornbusch, 1991; Walker, Maxson, & Newcomb, 2007). However, very few studies have examined the link between parenting style and criminal behavior (Haapasalo, 2001; Palmer & Gough, 2007; Schroeder, Bulanda, Giordano, & Cernkovich, 2010). Based on this lack of research of criminal outcomes associated with parenting type, it was important that the study was conducted.

There were two units of analysis for the current study. The first unit of analysis was college students at one university in the northeast, while the second unit of analysis was incarcerated individuals at two county jails in one northeastern state. The units of analysis were broken into two sample groups; again, one sample group consisted of college students and the other consisted of incarcerated men and women. Two sample groups were used because the research focusing on delinquent and criminal outcomes suggests that higher levels of criminality and delinquency are associated with certain parenting styles and that lower (and no) levels of criminality and delinquency are associated with distinctly different parenting styles (Avenevoli et al., 1999; Haapasalo, 2001; Hoeve et al., 2007; Jackson et al., 1998; Palmer & Hollin, 2001; Paschall et al., 2003; Simons et al., 2005; Steinberg et al., 1991, 1994, 2006). Despite the fact that the anticipated outcomes of the current study were expected to mirror the outcomes of prior investigations, this study built on earlier research in multiple ways.

First, the sample size of many of the studies (Chambers et al., 2000; Haapasalo, 2001; Palmer & Gough, 2007; Palmer & Hollin, 2001) limits the generalizability of their findings. The current study built on those small samples. Second, the current study sought to use original data to assess the link between parenting style and criminal involvement. Hoeve et al. (2007) and Simons et al. (2005) used secondary data collected from multiple datasets (including, the

Pittsburgh Youth Study, the Child-rearing and Family in the Netherlands Study, and the Family and Community Health Study) to analyze the link. This is to take nothing away from secondary data analysis, but it can be argued that the conceptual definition of "parent" is dynamic and a current operational definition was necessary in order to gain a clearer understanding of the crime link under investigation.

With that in mind, Chapter Two provides a discussion of Baumrind's initial conceptualization of parenting styles. In addition, the chapter analyzes empirical research that has tested the link that parenting style has with anti-social, delinquent, and criminal outcomes in children. The chapter concludes with a discussion of the ever-changing dynamic of the family and parenting.

Chapter Three provide an explanation of the research methodology that was used in this study. The overall research design, including sampling frames, formal access, informal access, and data collection procedures are discussed. In addition, this chapter provides a discussion of current and past survey design for research of this nature. This chapter also includes a discussion of data entry and subsequent data storage procedures given the nature of human subject protections that were implemented. Chapter Three concludes with a discussion of the overall analysis plan. Chapters Four and Five provide an analysis of the results of the current study. Chapter Six examines these results and provides a discussion of the results as well as implications for future research.

CHAPTER II

LITERATURE REVIEW

Conceptualization of Baumrind's Four Parenting Typologies

Baumrind (1966) introduced three distinct types of parental control – authoritarian, authoritative, and permissive. Over time, a fourth type of parental control – neglecting/rejecting – was introduced into the literature (Baumrind, 1971; Maccoby & Martin, 1983; Simons et al., 2004). The formulation of these four typologies is based upon the confluence between the concepts of demandingness and responsiveness. The following sections discuss the ideas of demandingness and responsiveness, as well as the four typologies that these ideas create.

Demandingness

Demandingness, according to Baumrind (1996, p. 411), refers to "claims that parents make on children to become integrated into the family and community by their maturity expectations, supervision, disciplinary efforts, and willingness to confront a disruptive child." Demandingness can be gauged based on the level of direct confrontation, well-defined monitoring techniques, and patterns of discipline (Baumrind, 1996; Simons et al., 2004) that one utilizes while parenting. Parents who use high levels of confrontation, monitoring, and consistent discipline are characterized as demanding; those with low levels of confrontation, monitoring, and inconsistent discipline are characterized as not demanding. Parents with high demandingness can be characterized as either authoritarian or authoritative in Baumrind's typology (Maccoby & Martin, 1983; Simons et al., 2004). Those with low levels of demandingness can be characterized as either permissive or neglecting/rejecting (Maccoby & Martin, 1983; Simons et al., 2004). The following sections provide a more in-depth description of confrontation, monitoring, and consistent discipline.

Confrontation. Baumrind (1996) describes "confronting" parents as those who are involved in the lives of their children and exercise firm, yet non-coercive, control. She writes (p. 411), "It is not confrontation or the exercise of firm control…but rather the *arbitrary*, *harsh*, and *nonfunctional* [emphasis added] exercise of firm control that has negative consequences for child behavior." The use of arbitrary, harsh, and nonfunctional control creates coercion, which negates the parents' attempt to correct child behavior (Baumrind, 1996), thus creating defiance in the child and hostility in the parent-child relationship (Hoffman, 1960).

In order to eschew the creation of coercion through confrontation, the parents must explain the reasoning for their demands (Baumrind, 1996). Additional research suggests that if the confronting parent is supportive, nonpunitive, authentic, and sensitive then parental confrontation does not negatively impact prosocial behavior in children (Baumrind, 1971, 1983; Hoffman, 1963). The parents who take these four ideas into consideration while confronting a child can exhibit more firmness in their commands and expect the child to respond more positively and prosocially than the parent who confronts a child using coercive techniques.

Monitoring. In this instance, monitoring simply refers to the level of supervision that a parent exhibits over a child. Close parental monitoring is believed to promote self-regulation and prosocial behaviors in children (Baumrind, 1996); Patterson (1982, 1986) explicitly suggested that close parental monitoring deterred antisocial behavior in young males.

Of relevance to this study is the idea that level of parental monitoring is positively related to socio-economic status (Baumrind, 1996). Simply, as socio-economic status decreases level of parental supervision also decreases. Baumrind (1996, p. 411) writes that "close supervision, and the provision of an orderly, consistent regimen require a greater investment of time and energy than" parents of lower socio-economic standing can provide, since they may work multiple jobs

in order to make ends meet. Socio-economic status of the family is an important facet to keep in mind when considering how parenting styles affect child development. As Brooks-Gunn, Britto, and Brady (1999) report, poverty is detrimental to childhood development. These authors suggest that impoverished children are at least twice as likely as higher SES children to: repeat a grade in school, get expelled or suspended from school, and/or drop out of school. In addition, impoverished children are at a greater risk of having learning disabilities and emotional and/or behavioral problems.

Consistent discipline. Baumrind (1996, p. 411) suggests that the "contingent use of positive or negative reinforcers immediately following desired or prohibited child behavior" is one of the most important factors in child behavioral management. Simply, the parent must consistently reinforce the child's behavior, whether good or bad, right away. Snyder and Patterson (1995) suggest that a parent with inconsistent disciplinary patterns creates an antisocial and defiant child. On the other hand, consistent parental disciplinary patterns, whether approving or disapproving, help create prosocial children and are not as detrimental to childhood development as inconsistent patterns of discipline.

Responsiveness

Responsiveness, according to Baumrind (1996, p. 410), is "the extent to which parents intentionally foster individuality and self-assertion by being attuned, supportive, and acquiescent to children's needs and demands." This can be gauged based on the level of warmth, reciprocity, and clear communication and person-centered discourse exhibited by a parent when dealing with a child (Baumrind, 1996; Simons et al., 2004). Parents who utilize high levels of warmth, reciprocal behavior, and communication are thought to be highly responsive. Parents who use low levels of those three facets are thought to be low in responsiveness. Those with high

responsiveness are thought to be authoritative or permissive in Baumrind's typology (Maccoby & Martin, 1983; Simons et al., 2004). On the other hand, parents with low responsiveness can be characterized as authoritarian or neglecting/rejecting (Maccoby & Martin, 1983; Simons et al., 2004). The following provides a more in-depth discussion of warmth, reciprocity, and clear communication and person-centered discourse.

Warmth. As a component of responsiveness, warmth is conceptualized as parents' expression of love for their child (Baumrind, 1996). Research suggests that prosocial development occurs in children whose parents utilize affective warmth and empathy while parenting (Eisenberg, 1992; Hoffman, 1975). On the other hand, a lack of parental warmth is thought to be associated with aggressive, antisocial, and hostile behaviors in children (Olweus, 1980). Parental dispositions such as anger, disapproval, and discouragement foster antisocial behavior in children; however, when children are highly antisocial they seek greater levels of parental approval (Baumrind, 1996). Baumrind also suggests that the concept of parental warmth is understudied. Thus, warm and supportive parents are likely to exhibit high levels of responsiveness, while parents who do not show warmth or support are likely to exhibit low levels of responsiveness.

Reciprocity. The idea of reciprocity in parent-child interactions also is understudied outside of infant-parent studies (Baumrind, 1996). One study by Parpal and Maccoby (1985) suggests that children are more likely to comply with the desires of the mother if the mother complies with the demands of the child. It can be argued that parents who encourage a reciprocal parent-child relationship will display high levels of responsiveness and those who do not encourage a reciprocal relationship will not be as responsive. The idea of reciprocity presents a limitation to the study of parenting styles and behavioral outcomes. Simply, is the parent

parenting based on reactions to the child's behavior or is the child's behavior a reaction to parenting styles used. This limitation is included in a discussion of the methodology.

Communication and discourse. There are two types of interpersonal discourse that this section focuses on: position-centered (hierarchy of authority; parent is in charge) and person-centered (focused on the individual rather than position of authority). Position-centered discourse is used by parents as a means of legitimizing their authority, while children likely view this type of interpersonal communication as coercive in favor of the parent (Baumrind, 1996). Person-centered discourse is not focused on the hierarchical nature of the parent-child relationship, rather it is intended to create friendly and transformative interactions between the parent and the child. Instead of relying on coercion, person-centered discourse relies on persuasion (Baumrind, 1996) and is generally considered to be a more effective form of communication than position-centered discourse (Applegate, Burke, Burleson, Delia, & Kline, 1985). It can be assumed that parents who use person-centered discourse while interacting with their children are highly responsive and those who use position-centered discourse have low levels of responsiveness. As stated, the confluence of demandingness and responsiveness results in four different parenting styles: authoritarian, authoritative, permissive, and neglecting/rejecting. Table 1 depicts Baumrind's typology based on high and low levels of parental demandingness and responsiveness (Maccoby & Martin, 1983; Simons et al., 2004). The following four sections provide an in-depth discussion of each parenting typology. After the introduction of each parenting type, an examination of empirical tests related to this typology is provided.

Table 1: *Baumrind's Typology of Parenting Styles*

	High Demandingness	Low Demandingness
High Responsiveness	Authoritative Style	Permissive Style
Low Responsiveness	Authoritarian Style	Neglecting/Rejecting Style

SOURCE.—Adapted from Maccoby and Martin (1983), and Simons et al. (2004)

Authoritarian

As stated, Baumrind (1966) was one of the first to conceptualize the authoritarian parenting style. According to this first conceptualization (p. 890), and repeated later by Baumrind (1968, 1971), "the authoritarian parent attempts to shape, control, and evaluate the behavior and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard." In addition to displaying tendencies that are typical of a parent with a high level of demandingness, the authoritarian parent is punitive, forceful, and believes that a virtuous child should be obedient and respect the value of having a good work ethic (Baumrind, 1966). The authoritarian parent attempts to preserve the order of a traditional family structure by limiting the child's autonomy, discouraging verbal "give and take" between parent and child, and demanding that the child accept what the parent says without question (Baumrind, 1966).

According to Baumrind (1971), in order to be classified as "authoritarian" the parent had to meet a variety of criterion (see Table 2). First, "both parents [had to] have scores above the median in Firm Enforcement or one parent [had to] score in the top third of the distribution" (Baumrind, 1971, p. 22). The Firm Enforcement measure of Baumrind's (1971) Parent Behavior Rating (PBR) clusters for both mothers and fathers consisted of the following eight items: firm enforcement, enforcement after initial noncompliance, cannot be coerced by child, requires child to pay attention, promotes own code of behavior, forces confrontation when child disobeys,

willingly exercises power to obtain obedience, and child must defer to parental expertise. In addition, the mother PBR cluster for Firm Enforcement included the item: disapproves of defiant stance; the father PBR cluster for Firm Enforcement included the following two items: uses negative sanctions when defied, and has stable/firm views.

Second, "both parents [had to] have scores below the median in Encourages Independence and Individuality (EII), or one parent [had to] score in the bottom third of the distribution, or the father [had to] score in the bottom third on Promotes Noncomformity and in the top third on Authoritarianism" (Baumrind, 1971, p. 22). The EII measure of the PBR clusters for both mothers and fathers consisted of the following four items: meaningful verbal interaction, encourages intimate verbal contact, defines child's individuality clearly, and does not lack empathic understanding (Baumrind, 1971). Additionally, the mother PBR cluster for EII included the following 10 items: gives reasons with directives, offers child alternatives, solicits child's opinions, listens to critical comments, encourages verbal give and take, promotes individuality in child, shares decision-making power with child, expresses own individuality, encourages oppositional behavior, and child must not conform to establishment. The father PBR cluster for EII included the following seven items: clear ideals for child, clear about parental role, regards self as competent person, flexible views, can specify aims and methods of discipline, regards self as potent and knowledgeable, and is secure during home visit.

Table 2: *Criteria for Assignment to PBR Cluster*

	Authoritarian	Authoritative	Permissive	Neglecting/Rejecting
Firm Enforcement	Both parents above median	Both parents above median *OR* one in top third	Both parents below median	-
Encourages Independence and Individuality	Both parents below median *OR* one in bottom third *OR*	Both parents above median *OR* one in top third	-	Both parents below median
Promotes Non-conformity	Father in bottom third *AND*	-	-	-
Authoritarianism	Father in top third	-	-	-
Passive-Acceptant	Both parents below median *OR* one in bottom third	Both parents below median *OR* one in bottom third	One parent in top third	-
Rejecting	-	-	One parent below median	Both parents above median *AND* one parent in top third *OR*
Expect Participation in Chores	-	-	Both parents below median *OR**	-
Directive	-	-	Both parents below median *OR**	-
Discourages Infantile Behavior	-	-	Both in bottom third*	-
Enrichment of Child's Environment	-	-	-	Both parents in bottom third *AND*
Discourage Emotional Dependency	-	-	-	Both parents in top third

*2 of 3 criteria have to be met

In addition to meeting criteria for the EII cluster, the father had to meet criteria for both the Promotes Nonconformity cluster and the Authoritarianism cluster, as stated above. The Promotes Nonconformity PBR cluster for fathers included the following five items: child must not conform to establishment, promotes individuality in child, expresses own individuality, sees child-rearing practices as atypical, and values expressive traits more than instrumental traits (Baumrind, 1971). The Authoritarianism PBR cluster for fathers included the following 13 items: does not listen to critical comments, does not solicit child's opinions, assumes stance of personal infallibility, does not share decision-making power with child, disobedience does not elicit further explanation, does not offer child alternatives, becomes inaccessible when displeased, uses obedience as a salient construct, does not encourage oppositional behavior, does not encourage verbal give and take, feels that parents' needs take precedence, does not encourage independent actions, and does not give reasons with directives (Baumrind, 1971). Again, for the parents to garner the label of authoritarians, the father had to score in the bottom third of the Promotes Nonconformity measure and in the top third of the Authoritarianism measure.

Finally, "both parents [had to] score below the median in Passive-Acceptant or one parent [had to] score in the bottom third" (Baumrind, 1971, p. 22). The Passive-Acceptant PBR cluster consisted of the following four items for both mothers and fathers: gentle manner, avoids open confrontation, inhibits annoyance or impatience when child disobeys, and inhibits annoyance or impatience when child dawdles or is annoying. The Passive-Acceptant measure for mothers consisted of the additional three items: does not use negative sanctions when defied, does not discipline harshly, and feels shame when expressing anger. The Passive-Acceptant measure for fathers consisted of the following two items: does not disapprove of defiant stance and does not become inaccessible when displeased.

The similarities are clear between Baumrind's (1966) initial conceptual definition of authoritarian parents to the criterion that Baumrind (1971) demanded parents meet in order to be defined as authoritarian. Furthermore, the reliability scores for each of Baumrind's (1971) eight PBR clusters used to define authoritarian parents range from .83 to .94. DeVellis (2003) suggests that coefficient alpha scores between .80 and .90 are "very good," but that "one should consider shortening the scale" (p. 96) when scores are "much above .90." One could consider three of Baumrind's clusters with coefficient alpha scores of .93, .94, and .94 as being "much above .90." The questionable clusters include maternal Firm Enforcement and EII, which consist of 9 and 14 items, and paternal Authoritarianism, which consists of 13 items.

Authoritative

Just as Baumrind (1966) was among the first to conceptualize the authoritarian style of parenting, she also was one of the first to conceptualize the authoritative style of parenting. According to this first conceptualization (p. 891), and again repeated by Baumrind (1968, 1971), "the authoritative parent attempts to direct the child's activities in a rational, issue-oriented manner." The authoritative parent acts with both a high level of demandingness and a high level of responsiveness. In addition, the authoritative parent welcomes a verbal give and take with the child, solicits objections from the child, explains the reason for certain rules, and encourages the child to be autonomous (Baumrind, 1966, 1968, 1971). Despite being quite open-minded, the authoritative parent does not hesitate to exert firm control and use power, yet one must keep in mind that the parent does this in order to set standards for the child's future behavior (Baumrind, 1966, 1968, 1971).

In order to be classified as "authoritative" the parent had to be classified according to a variety of criterion, as described by Baumrind (1971). First, "both parents [had to] have scores

above the median in Firm Enforcement, or one parent [had to] score in the top third of the distribution" (Baumrind, 1971, p. 23). This initial requirement is identical to the first requirement needed for classification as authoritarian and is discussed in detail above.

Second, in order to be considered authoritative, "both parents [had to] score above the median in EII or one parent [had to] score in the top third of the distribution" (Baumrind, 1971, p. 23). When comparing this requirement to the requirement for classification as an authoritarian one sees that authoritative parents are thought to encourage independence and individuality in their children at a higher level than authoritarian parents. Again, the items used to create the EII PBR cluster are detailed above.

Finally, and similar to authoritarian parents, in order to be considered authoritative "both parents [had to] score below the median in Passive-Acceptant or one parent [had to] score in the bottom third" (Baumrind, 1971, p. 23). Once again, the Passive-Acceptant scale is discussed above. It is interesting to note, however, that the Promotes Nonconformity PBR cluster is not used to determine if a parent is authoritative. While revisiting the items in the Promotes Nonconformity cluster one realizes that fathers in this cluster do not expect their children to readily conform, which is typical of parents in Baumrind's (1966) initial conceptualization of authoritativeness, in that fathers promote individuality and expressive traits in their children, which is strikingly similar to the notion of autonomy.

Permissive

In addition to being one of the first to conceptualize the authoritarian and authoritative typologies, Baumrind (1966) also was among the first to conceptualize the permissive style of parenting. According to the initial conceptualization (p. 889), and later reiterated by Baumrind (1968, 1971), "the permissive parent attempts to behave in a nonpunitive, acceptant, and

affirmative manner toward the child's impulses, desires, and actions." As suggested above, the permissive parent acts with a high level of responsiveness as indicated by some of Baumrind's (1966) initial conceptualizations which suggest that the responsive parent is likely to explain family rules, to encourage children to use the parent as a resource whenever they wish, and to discourage children from following defined standards of society. The permissive parent also acts with a low level of demandingness. This notion also is supported by some of Baumrind's (1966) early conceptualizations which assert that the permissive parent is likely to make "few demands" for prosocial behavior, does not use overt power, and avoids implementing control over the child.

In order to actually be characterized as "permissive," however, the parent in Baumrind's (1971) later studies had to be classified by a variety of criterion, which is similar to the schemes used to classify authoritarian and authoritative parenting styles. First, "both parents [had to] have scores below the median on Firm Enforcement" (Baumrind, 1971, p. 23). While revisiting the items in both the maternal and paternal Firm Enforcement PBR clusters and thinking about the idea of demandingness, one realizes that it makes sense for the permissive parent to score below the median on Firm Enforcement while the authoritarian and authoritative parents had to score above the median; highly demanding parents are likely to be firm enforcers of rules and regulations while those low in demandingness are not likely to be firm.

Second, "one parent [had to] score in the top third of the distribution on Passive-Acceptant" (Baumrind, 1971, p. 23). Again, in order to be recognized as authoritarian or authoritative, both parents had to score below the median or in the bottom third of the distribution of Passive-Acceptant. Similar to the differences in Firm Enforcement, the differences between permissive parents and authoritarian or authoritative parents with regards to

the Passive-Acceptant distribution also make sense theoretically when the idea of demandingness is taken into consideration.

Third, "at least one parent [had to] have scores below the median on Rejecting" (Baumrind, 1971, p. 23). The Rejecting PBR cluster consisted of the following three items for both mothers and fathers: cool towards child, unresponsive towards child, and disciplined harshly (Baumrind, 1971). In addition to these three items, the maternal PBR cluster for Rejecting consisted of the following three items: needs of the parent take precedence, assumes a stance of personal infallibility, and becomes inaccessible when displeased. When thinking about the concepts associated with responsiveness and the idea that permissive parents are highly responsive, it is clear that parents must not have high scores on the Rejecting measure in order to be classified as permissive. It should be noted that the coefficient alpha for the maternal Rejecting construct was .88 and that it was .82 for the paternal construct; again, DeVellis (2003) would consider these levels "very good."

Finally, in order to be classified as permissive two of the following three joint (both parents) requirements must be met, "Expect Participation in Household Chores [EPHC], below median score; Directive, below median score; Discourage Infantile Behavior [DIB], low third" (Baumrind, 1971, p. 24). The joint PBR cluster of EPHC consisted of the following six items: demand child put toys away, demand child cleans own messes, discourage obstructive behavior, sets regular tasks, encourages self-help, and demands child dress self (Baumrind, 1971). While examining Baumrind's (1966, p. 889) initial notion that the permissive parent "makes few demands for household responsibility" it is clear that in order to be classified as permissive the parent would have to score below the median on EPHC. The PBR cluster for Directive consisted of five items: regimen set for child, fixed bedtime hour, many rules and regulations, and many

restrictions on both TV and eating (Baumrind, 1971). Baumrind (1966) noted that the permissive parent did not demand orderly behavior; thus, it also comes as no surprise that permissive parents also had to score below the median on the Directive cluster. The DIB cluster consisted of five items: parents initiate toilet training, discourage baby speech and mannerisms, limit bottle and pacifier usage, demand mature table behavior, and demand mannerly behavior during visits (Baumrind, 1971). The coefficient alpha for EPHC was .86 (very good); Directive was .78, which is respectable according to DeVellis (2003); and, DIB was .63, which DeVellis suggests is undesirable. Behaviors of children with permissive parents are discussed in a later section.

Neglecting/Rejecting

Baumrind's (1966) initial conceptualization of parenting styles did not include the "neglecting/rejecting" style. But, based on the confluence of demandingness and responsiveness (Maccoby & Martin, 1983; Simons et al., 2004), one realizes that a neglecting/rejecting parent is not warm, reciprocal, confrontational, supervisory, consistent in discipline, or a clear communicator (Baumrind, 1996). Baumrind's (1971) introduction of the neglecting/rejecting parenting style based on PBR clusters supports the assertion that a neglecting/rejecting parent is neither demanding nor responsive.

Three requirements must be met in order to be classified as neglecting/rejecting according to Baumrind (1971). First, "both parents [had to] have scores below the median for EII" (Baumrind, 1971, p. 24). Again, this relates to the level of responsiveness seen in parents and also is indicative of authoritarian parents who have low levels of responsiveness. Second, "both parents [had to] have scores above the mean in Rejecting" (Baumrind, 1971, p. 24). By looking at the items within the Rejecting PBR clusters again, one easily realizes that it makes sense that scores must be high in this construct in order to be considered neglecting/rejecting.

Third, "one parent [had to] score in the top third of the distribution on Rejecting, or…the family on the Joint clusters [had to] score in the bottom third on Enrichment of Child's Environment [ECE], and the top third on Discourage Emotional Dependency [DED]" (Baumrind, 1971, p. 24). The joint PBR cluster of ECE consisted of the following five items: invokes cognitive insight, intellectually stimulates environment, sets standards of excellence, makes educational-based demands on children, and are differentiated and stimulating (Baumrind, 1971); the coefficient alpha score for this construct was .85 (very good). Based on these items, one can argue that the requirement that parents score in the bottom third of this construct in order to be labeled neglecting/rejecting makes sense theoretically. The joint PBR cluster of DED consisted of the following two items: discouraged emotional dependency and not overprotective (Baumrind, 1971); the coefficient alpha of this construct was .77 (respectable). Again, it makes sense that a neglecting/rejecting would discourage emotional dependency in the parent-child relationship. Additionally, a neglectful or rejecting parent is unlikely to be overprotective of their child. Behaviors of children with neglecting/rejecting parents are discussed in a later section. The next section discusses how each of these four parenting types have been examined throughout the social sciences; methodology, measurement, and outcomes of these studies receive much of the focus.

Examining Parenting Style and Deviant Behavior

A variety of social science literature has focused on the relationship between parenting style and subsequent child outcomes. Mostly, this includes examinations of antisocial and general problem behaviors in young children (Baumrind 1967, 1971, 1972; Baumrind & Black, 1967; Paulussen-Hoogeboom et al., 2008) and adolescents (Barber et al., 1994; Lamborn et al., 1991; Vieno et al., 2009). While these studies have been important in examining the link

between parenting styles and negative behaviors in young children and adolescents, they are not as relevant as other research is to the present study.

Additional research has assessed deviant childhood activities like smoking, drinking, and drug use, while related studies have focused on delinquent behavior. A limited number of studies have investigated the specific link between parenting style and criminal involvement. The following section looks at relevant prior literature that has examined the link between Baumrind's parenting typologies and deviant behavior.

The Link between Parenting Style and Deviant Behavior

As stated, there is a large body of literature (see Appendix A) that examines the link between parenting styles and problematic and antisocial behavior in young children (Baumrind 1967, 1971, 1972; Baumrind & Black, 1967; Paulussen-Hoogeboom et al., 2008) and adolescents (Barber et al., 1994; Lamborn et al., 1991; Vieno et al., 2009). The major findings in this area suggest that there is a consistent linkage between the authoritative style of parenting and fewer problem behaviors among children and adolescents. There also exist significant associations between the authoritarian, permissive, and neglecting/rejecting styles of parenting and problem behaviors amongst adolescents and children. This initial research of the link between parenting style and adolescent and childhood behavior, especially the work of Baumrind (1967, 1971, 1972; also see Baumrind & Black, 1967), provided the catalyst for examinations of the link between parenting style and deviant, delinquent, and criminal behavior in teenagers and adults. As such, the remainder of the literature review focuses on studies that examine the relationship between parenting styles and deviance (i.e., alcohol and tobacco use by minors), delinquency, and criminality in adolescents and adults.

Alcohol, tobacco, and substance use. In addition to examining the relationship between parenting style and adolescent problem behaviors like lying, cheating, and verbally fighting, researchers also have looked at the relationship between parenting style and other forms of deviant (and borderline delinquent) behavior. Some of these behaviors include alcohol use (Baumrind, 1991; Patock-Peckham & Morgan-Lopez, 2007), cigarette use (Chassin et al., 2005; Harakeh et al., 2004; Huver et al., 2007; Jackson et al., 1994; Jackson et al., 1998; Mott et al., 1999; and Simons-Morton et al., 2001), and substance use (Baumrind, 1991). Similar to research that investigated parenting style and adolescent behavioral problems, this research varies in methodological procedure and sample characteristics. The following discusses these methodological differences and the empirical results of these varied studies (also see Appendix B).

Methodology of alcohol, cigarette, and substance abuse studies. Baumrind (1991) studied alcohol and substance use patterns relative to parenting style amongst adolescents. Baumrind utilized data gathered in her earlier studies of parenting styles and childhood problem behaviors (Baumrind, 1967, 1971, 1972; Baumrind & Black, 1967). For the 1991 study, Baumrind relied on data gathered during the third phase of data collection when the adolescents were 15-years-old. The families who participated in Baumrind's study underwent changes between the first and third phases of data collection. At phase one all families were considered intact, meaning that the biological parents were married and living together, but by the third phase 38% of the original couples had divorced (Baumrind, 1991). The author failed to report the number of adolescents who were living solely with their mother (or father), thus the results must be viewed with a small level of skepticism for two reasons. First, Hetherington and Stanley-Hagan (1997) suggest that juveniles who grow up without a father have problems controlling

their aggression and psychosocial development – this may lead to increased risk of substance abuse. Also, while playing the dual role of mother and father, single mothers may be overcome with stress that undermines their ability to parent effectively, thus creating an environment of inconsistent parenting (McLanahan &Teitler, 1999). Based on these two ideas, Baumrind (1991) could have reported descriptive statistics pertaining to the composition of the families of the 139 adolescents observed during the third phase of data collection, but without the benefit of hindsight this is only a slight omission.

Despite using the same methodology and cohort of participants to study alcohol/substance abuse and adolescent problem behaviors, Baumrind's (1991) research team classified parents into six family types (compared to 15) based on their observations. These six classifications include (1) authoritative families (authoritative), (2) conscientious/engaged families (permissive), (3) directive families (authoritarian), (4) good-enough families (mid-level of demandingness and responsiveness), (5) nondirective families (permissive), and (6) unengaged families (neglecting/rejecting). Aside from the Baumrind (1991) study, data about minor deviant behavior relative to parenting style has been gathered using self-report surveys.

Patock-Peckham and Morgan-Lopez (2007) also studied patterns of alcohol usage relative to parenting styles in a sample of 441 college students who answered self-report surveys. This sample included 225 men and 216 women who were predominantly Caucasian (75.6%) with an average age (in years) of 19.48. Limitations of Patock-Peckham and Morgan-Lopez's research are (a) participants received class credit for their participation, and (b) non-drinkers were excluded from participation. To gain a more accurate understanding of the effect that parenting has on alcohol use researchers must include those who do not consume alcoholic

beverages otherwise they will not be able to determine which parenting types steer young people away from (or towards) alcohol use.

In their assessment of the relationship between alcohol consumption and parenting style, Patock-Peckham and Morgan-Lopez (2007) used Buri's (1991) PAQ to measure respondents' perceptions of parenting styles. Consistent with Buri's original alpha scores, Patock-Peckham and Morgan-Lopez (2007) reported authoritarian scores of .85 (mother) and .90 (father), authoritative scores of .82 (mother) and .88 (father), and permissive scores of .77 (mother) and .81 (father). Similar alpha scores across multiple diverse tests suggest that Buri's PAQ is a sufficient measure to use in order to assess perceptions of parenting styles in the proposed study. The remainder of this section discusses tobacco use relevant to parenting style.

Each of the seven tobacco studies mentioned briefly above also relied upon data gathered from self-reports. Chassin et al. (2005) sampled 382 adolescents between the ages of 10 and 17 from a midwestern community. Harakeh et al. (2004) relied on data gathered from 1,070 Dutch adolescents between the ages of 10 and 14. Huver et al. (2007) also reported findings from the Netherlands; 482 Dutch adolescents between the ages of 12 and 19 completed a 16-page questionnaire as part of the Study of Medical Information and Lifestyles in Eindhoven (SMILE) project. Jackson et al. (1994) gathered data from 937 elementary school children in northern California, while Jackson et al. (1998) sampled 1,236 fourth and sixth graders in North Carolina. Mott et al. (1999) surveyed approximately 2,300 high school freshmen in southern California. Simons-Morton et al. (2001) sampled over 4,000 middle school students from a Maryland suburb near Washington, D.C.

Studies researching juvenile tobacco usage measured parenting styles in a variety of ways. First, Huver et al. (2007) utilized a 22-item instrument asking about parenting styles that

was based on the measurement tool used by Lamborn and his colleagues in the behavioral studies discussed above (Lamborn et al., 1991). Similar to Lamborn et al. (1991), Jackson et al. (1994) and Mott et al. (1999) conceptualized their measures of parenting style in accordance with Baumrind's four typologies. Mott et al. (1999), however, used only two items (how parents exercised control over their children's decision-making and how parents reacted to adolescent smoking) to measure the four parenting types. Somehow, doing so allowed them to discern that roughly 38% of their sample had authoritative parents, 31% authoritarian, 20% permissive, and 11% neglecting/rejecting. The authors noted that authoritative and authoritarian parents were the main decision-makers, but that authoritative parents allowed for input from their children, whereas adolescents with permissive and neglecting/rejecting parents made all of the decisions, although adolescents in permissive homes consulted with their parents first (Mott et al., 1999). It should be noted that the characteristics of each parenting style are accurate, but one should be wary of results based on the limited number of items used to measure each style.

As stated, Jackson et al. (1994) also included measures for Baumrind's original parenting styles. Like Mott et al. (1999), there were discrepancies with these measures. Simply, Jackson and colleagues measured solely for authoritative and non-authoritative parenting styles. In addition to only measuring for authoritative and non-authoritative (which, is not a style) parenting, Jackson et al. (1994) used nine test items (six for authoritative and three for non-authoritative) to examine the relationship. Granted, the nine items capture a wider realm of behaviors associated with authoritative parenting than Mott's measures capture, but one should still be skeptical of the generalizability of results based on a dichotomous measure – especially results for those who report having non-authoritative parents.

Years later, Jackson et al. (1998) developed the Authoritative Parenting Index (API), which measured demandingness and responsiveness with 20 survey items based exclusively on Baumrind's research. Coefficient alpha scores for the API in Jackson et al. (1998) were based on a numbers of factors including sex, race, and grade-in-school of the respondent. For example, fourth-grade white males had alpha scores of .82 on the responsiveness scale and .65 on the demandingness scale. To reiterate, Jackson et al. (1998) used male and female fourth and sixth graders who were both African American and white. Alpha scores for this group on the responsiveness measure ranged from .71 to .90, while alpha scores on the demandingness measure ranged from .65 to .81. While generally recognized as acceptable coefficient alpha scores they are not as good as Buri (1991), especially the demandingness measure.

Both Chassin et al. (2005) and Harakeh et al. (2004) included items that tested parenting styles using measures of control (psychological and strict), as well as parental acceptance (Chassin et al., 2005) and parental knowledge (Harakeh et al., 2004). The control measures utilized in Chassin et al. (2005) were from the Child Report of Parent Behavior Inventory (CRPBI). Similar to the PAQ (Buri, 1991), the CRPBI asks respondents their level of agreement (5-point Likert scale) with a statement about a particular aspect of parenting. Additionally, acceptance was measured using seven items from the Network of Relationships Inventory (NRI) that asked about the parent-child relationship. Chassin and colleagues reported healthy coefficient alpha scores of .91 for each of the two scales. Continuing with the seeming theme of inconsistent measurements throughout the research, Chassin et al. (2005) used reported scores from the control and acceptance measures to assign parents to one of Baumrind's four types. High levels of control and acceptance were indicative of authoritative parents while low levels of control and acceptance were indicative of neglecting/rejecting parents (Chassin et al., 2005).

Harakeh et al. (2004) also measured aspects of parental control. The first aspect measured was psychological control, which the authors defined as coercive and manipulative parenting. Psychological control was measured using nine items that asked respondents their level of agreement (5-point Likert scale) with statements about the way their parents treated them. Strict control was similarly measured using four items that assessed adolescents' perceptions of the level of control that their parents placed on where they could go and what they could do. Parental knowledge was measured using four items in a Likert scale format that asked respondents if their parents knew where they were and what they were doing. Harakeh et al. (2004) report internal consistency scores ranging from .72 to .87 for the three measures. While reporting healthy reliability scores, the scales are not arranged in such a way as to let researchers place respondents into one of four typologies.

Similar to the strict control and parental knowledge measures used by Harakeh et al. (2004), Simons-Morton et al. (2001) utilized a six item scale measuring parent involvement (how much does the parent know about the respondent) and a four item scale measuring parent monitoring (how often does the parent check up on the respondent). Unlike the measure of seemingly coercive parents used by Harakeh and colleagues, however, Simons-Morton and his colleagues used a five item measure for parental support (a parent who helps), a seven item measure for psychological autonomy (a parent who encourages the child to be her/himself), and a four item measure for parent-child conflict. The sixth measure that Simons-Morton et al. (2001) used was a six item scale measuring parent expectations (how upset the parent would be if the respondent engaged in certain behaviors). The following section reports the findings of the studies discussed above.

Empirical results of alcohol, cigarette, and substance abuse studies. The results of studies that examined the link between parenting styles and adolescent's use of alcohol, tobacco, and other substances did not follow the same pattern as studies that examined adolescent problem behaviors. For the most part, there was little variation in parenting style and tobacco use (Chassin et al., 2005; Harakeh et al., 2004; Huver et al., 2007; Jackson et al., 1994; Jackson et al., 1998; Mott et al., 1999; Simons-Morton et al., 2001), alcohol use (Baumrind, 1991; Patock-Peckham & Morgan-Lopez, 2007), and drug use (Baumrind, 1991; Lamborn et al., 1991). This section details the results.

Huver et al. (2007, p. 586) suggested, "Specific parenting styles…were not associated with smoking cognitions or behavior," which supports findings from both Harakeh et al. (2004) which found that psychological parental control, strict parental control, and parental knowledge were not significantly related to adolescent smoking behaviors and Mott et al. (1999), who found no significant relationship between their two-item measure of parenting style and cigarette use. The findings from Huver et al. (2007), however, contradict evidence suggesting that children of neglecting/rejecting parents are more likely to engage in tobacco use than other children (Chassin et al., 2005) or that children of authoritative parents are likely to exhibit the lowest rates of intent to and experimentation with, as well as initiation to, smoking (Jackson et al., 1994). With respect to those who did smoke tobacco, the effect that mothers had on smoking behavior was not different than the effect that fathers had, and each had similar effects on sons as well as daughters (Huver et al., 2007).

Continued examination of the relationship between maternal and paternal affects on deviant behaviors by Patock-Peckham and Morgan-Lopez (2007) reported evidence that maternal parenting style is not significantly related to alcohol use. Overall, children with an

authoritative father were less likely than children with an authoritarian father to abuse alcohol. However, the effect that authoritarian fathers had on their daughters was not seen in the authoritarian father-son relationship. Simply, the data suggest that authoritarian fathers have a negative social bond with their daughters, which indirectly leads to alcohol abuse (Patock-Peckham & Morgan-Lopez, 2007). In addition, college-aged respondents who reported feeling rejected by their fathers were more likely to succumb to alcohol-related problems than those who felt rejected by their mothers (Patock-Peckham & Morgan-Lopez, 2007). Similarly, Simons-Morton et al. (2001) note that adolescents whose parents are highly involved, have high expectations, and hold their children in high regard are less likely to smoke cigarettes or drink alcohol than adolescents whose parents display the opposite behaviors. Neither cigarette use nor alcohol use by the child was significantly related to parenting style (Simons-Morton et al., 2001).

Baumrind (1991) reported on alcohol and drug use. Approximately 25% of the sample consisted of non-users of drugs and alcohol; these non-users were more likely to have authoritative parents, as were recreational users (Baumrind, 1991). Parents of both heavy alcohol users and alcoholics were most likely neglecting/rejecting – this also held true for parents of heavy drug users and drug addicts (Baumrind, 1991). Incidentally, multiple studies have reported that children of authoritative and authoritarian parents show little difference in patterns of drug and alcohol use (Baumrind, 1991; Lamborn et al., 1991), contrary to the results presented by Patock-Peckham and Morgan-Lopez (2007). Significantly fewer children with authoritative and authoritarian parents use drugs compared to children with neglecting/rejecting parents (Lamborn et al., 1991). Additionally, the same can be said of the differences between authoritative and authoritarian parents and permissive parents. Simply, children from permissive and neglecting/rejecting families were more likely than children from authoritative and authoritarian

families to succumb to drug and alcohol use (Baumrind, 1991; Lamborn et al., 1991). Baumrind (1991) even noted that roughly 30% of the substance use variance can be explained by parenting type. The contrasting results presented in the studies discussed above suggest that further research is needed in order to better understand the relationship between parenting style and low-level deviant behaviors such as alcohol, drug, and tobacco use.

The Link between Parenting Style and Delinquent/Criminal Behavior

In addition to the link between parenting style and deviant behavior, the link between parenting style and delinquent and/or criminal behavior also has been studied in the social science literature. The research that has been conducted has utilized a variety of methodologies and measures, while producing consistent results. In short, respondents who perceive their parents to be authoritative are less likely to engage in delinquent and criminal behaviors, whereas those who perceive their parents as neglecting/rejecting are more likely to engage in delinquent and criminal activities. The following sections discuss the methodological design, including measurement instruments, and empirical findings of research that has examined the link between parenting styles and delinquent and criminal behavior.

Adolescent delinquent behavior. The previous section examined literature looking at the link between parenting style and forms of deviant behavior, including behavior that could be considered delinquent (cigarette, drug, and alcohol use amongst minors). While acknowledging that use of those substances by children constitutes delinquent behavior – and that use of illegal drugs by adults constitutes criminal behavior – this section focuses on non-drug/non-alcohol offenses. Consistent with the adolescent problem behavior and substance use studies, the research that is discussed in the following sections employs various methodological designs, yet reports similar results. The following will discuss the methodology and results from empirical

analyses of the link between parenting style and adolescent delinquent behavior (also see Appendix C).

Methodology of delinquent behavior studies. A handful of studies have examined the explicit link between parenting style and delinquent behavior. The first of these types of research studies to be addressed (Avenevoli et al., 1999; Steinberg et al., 1994; Steinberg et al., 1991) relied on the same data that were retrieved in an analysis discussed above (Lamborn et al., 1991), specifically self-report data from high school students in California and Wisconsin. Sample sizes varied amongst the four studies: 11,669 (Avenevoli et al., 1999); 4,081 (Lamborn et al., 1991); 7,600 (Steinberg et al., 1991); and, 6,357 (Steinberg et al., 1994).

The majority of the remaining studies relied on participation by adolescents in the United States (Hoeve et al., 2007; Jackson et al., 1998; Paschall et al., 2003; Simons et al., 2005; Steinberg et al., 2006; Walker et al., 2007), with additional participation from across the globe (Chambers et al., 2000; Hoeve et al., 2007; Palmer & Hollin, 2001; Stattin & Kerr, 2000). Starting with self-report studies in the United States, Jackson et al. (1998) had 1,490 ninth and tenth grade students in North Carolina complete surveys in which they reported their level of violent behavior. Paschall et al. (2003) also utilized a self-report questionnaire to examine the effect parenting style had on delinquent behavior in a sample of 175 male African American adolescents in a medium-sized city in the southeast; the boys' female caretakers also were surveyed. Approximately 90% of the caretakers reported being a biological mother to the boy, 4% were grandmothers, 4% were aunts, and 1% was either stepmothers or foster mothers (Paschall et al., 2003). In Scandinavia, Stattin and Kerr (2000) had 703 14-year-old Swedish youths from seven communities in Sweden self-report their levels of delinquency and their perceptions of their parents. While in the United Kingdom, Palmer and Hollin (2001) asked 94

students between the ages of 12 and 18 from the West Midlands area of England to fill out self-report questionnaires. The average age of students in this study was 15.69 years-old; approximately 70% of this sample was female.

Walker et al. (2007) created their sample of 349 African American (21%) and Hispanic (71%) boys between the ages of 12 and 17 by randomly selecting homes in eight neighborhoods in Los Angeles County, California. Researchers conducted structured interviews that lasted up to 90 minutes in duration. Steinberg et al. (2006) also used adolescents between similar ages (14-17; average age was 16). This study utilized 1,355 adolescents who had been adjudicated for "felony offenses with the exception of less serious property crimes…misdemeanor weapons offenses and misdemeanor sexual assault" (p. 48); the authors allowed for a maximum 15% of the sample to include male drug offenders because they believed drug offenses would otherwise overtake their sample. Additionally, this study is one of the few to include females (16%) and most of the respondents lived with their single mother (83%), while only 15% lived with both biological parents (Steinberg et al., 2006). Steinberg et al. (2006) recruited individuals to participate in the study based on court-provided information. Researchers met with eligible participants over the course of two days in sessions that were two hours in duration. The researcher read the survey off of a computer to the respondent who then self-reported the information aloud to the interviewer or entered the information into the computer if it was of a sensitive nature (Steinberg et al., 2006). The final delinquency-parenting study to conduct semi-structured interviews, used 122 male offenders between the ages of 15 and 22 from the Young Offender's Institution in Scotland (Chambers et al., 2000). This sample represented one-fourth of the population in one of the largest Young Offender's Institutions in the country (Chambers et al., 2000).

Simons et al. (2005) also used adolescent participants, in addition to their parents. Contrary to most of the other studies, however, Simons and colleagues performed a secondary data analysis using data gathered for the Family and Community Health Study (FACHS). FACHS data were collected from African American families in Georgia and Iowa who had a child in fifth grade at the time of recruitment for the first wave of data collection. During the first phase in 1998 this included 867 children (46.1% boys; 46.7% in Georgia) and 738 at wave two in 2000; the authors noted that they used complete data from 633 children (Simons et al., 2005). In addition to conducting interviews with the fifth grade child, researchers also interviewed the child's primary caregiver and a secondary caregiver when one was available. The child's primary caregiver was deemed "a person living in the same household as the target child…who was responsible for the majority of the child's care" (Simons et al., 2005, p. 1000). The biological mother was deemed the primary caregiver in 84% of cases, while the biological father and grandmother were each primary in 6% of cases. It is interesting to note that 83% of the children in Steinberg et al. (2006) lived with a single mother and the biological mother was the primary caregiver in 84% of the cases in Simons et al. (2005). Nationally, nine percent (12.9 million) of all households are headed by a single parent; 10.4 million (80.6%) single parent families are headed by a single mother (U.S. Census Bureau, 2009).

Hoeve et al. (2007) also completed a secondary data analysis in their investigation of the link between parenting style and juvenile delinquency. Data from two studies, the Pittsburgh Youth Study (PYS) and the Child-Rearing and Family in the Netherlands Study (CFNS), were used. The authors used PYS data from the years 1995-2000, which included 472 boys. PYS researchers conducted interviews with the boys, the boys' parents (or primary caregiver), a teacher, and collected official juvenile court records (Hoeve et al., 2007). The authors point out

that 93% of juvenile participants lived with their biological mother, but that only 34.1% of them lived together with their biological father. Thus, historically it appears that social scientists have attempted to examine the link between parenting style and adolescent deviance/delinquency by using children whose parenting situation is very dissimilar from national averages. To complete their study, Hoeve et al. (2007) examined data collected from 132 male participants in CFNS who were between the ages of 19 and 27. Respondents completed self-report questionnaires while researchers conducted interviews with family members.

Measure of parenting styles in studies of delinquent behavior. The authors discussed above measured the link between parenting style and adolescent delinquency in a number of ways. First, "parenting style" was subjected to a number of conceptualizations, among them: acceptance/involvement (Avenevoli et al., 1999; Steinberg et al., 1991, 1994, 2006), authoritative parenting (Jackson et al., 1998; Simons et al, 2005), bond/attachment (Chambers et al., 2000; Palmer & Hollin, 2001; Walker et al., 2007) firm control/strictness (Avenevoli et al., 1999; Palmer & Hollin, 2001; Paschall et al., 2003; Stattin & Kerr, 2000; Steinberg et al., 1991, 1994, 2006), monitoring (Palmer & Hollin, 2001; Paschall et al., 2003; Walker et al., 2007) and psychological autonomy (Avenevoli et al., 1999; Steinberg et al., 1991). Additionally, Hoeve et al. (2007) utilized a measure to examine family-related variables, including closeness to child/affection, consistent discipline, conformity, and responsiveness.

Hoeve et al. (2007) reported that the majority of their measurement items were based on the work of Maccoby and Martin (1983), which was discussed earlier. The "expression of affection" measurement was based on nine mother-reported items and five child-reported items and examined the level of fondness directed towards the child. "Demands for conformity" studied whether the mother expected the child to abide by fixed rules and was based on the

mothers' responses to eight items and children's responses to four items. "Ignoring" examined the mothers' patterns of anger when the child was misbehaving using five items. And, "responsiveness" used eight items to examine the children's perceptions of their mothers' level of attentiveness. As stated, Hoeve et al. (2007) relied heavily on the work of Maccoby and Martin (1983) when constructing these scales, thus they are similar conceptually to Buri's (1991) PAQ measurement instrument and have a similar range of alpha scores (.70 for ignoring compared to .75/.74 for mother/father permissive behavior; .87 for expression of affection compared to .82/.85 for mother/father authoritative behavior). It can be argued that the strength and utility of the PAQ is reaffirmed every time another measurement tool examines similar concepts and reports similar internal consistency scores.

The acceptance/involvement measures used in the Avenevoli and Steinberg studies listed above each used 10 items (Steinberg et al., 1994) to 15 (Avenevoli et al., 1999; Steinberg et al., 1991). This measure examined the children's perceptions of their parents' love for them, responsiveness to them, and involvement in their lives. The alpha score for this measure across all three studies was .72. The strictness/firm control measure used in the same three studies examined the children's perceptions of their parents' level of monitoring and rule setting. Each study utilized nine items in this measure and reported an alpha score of .76 across the board. Psychological autonomy, used by Avenevoli et al. (1999) and Steinberg et al. (1991, p. 25), assessed "the extent to which parents employ noncoercive, democratic discipline and encourage the adolescent to express individuality within the family." This measure has 12 items in each study with an alpha score of .72.

Steinberg et al. (2006) used similar measures, parental warmth and parental firmness. The parental warmth scale utilized nine items that assessed both maternal and paternal levels of

support and understanding (maternal warmth α = .85; paternal warmth α = .88). Parental firmness assessed perceptions of parental rules. It was noted that the researchers did not test for separate levels of maternal and paternal firmness, thus there is only one alpha score (α = .80; Steinberg et al., 2006).

Jackson et al. (1998) eschewed Steinberg's authoritative parenting measures because the authors "judged the item wording either too difficult…or inappropriate for children" (p. 322). Instead, Jackson and her colleagues developed the API, which, as discussed above, measured demandingness and responsiveness with 20 survey items based exclusively on Baumrind's research. Coefficient alpha scores for the API in Jackson et al. (1998) were based on a number of factors including sex, race, and grade-in-school of the respondent. For example, ninth-grade white males had alpha scores of .81 on the responsiveness scale and .81 on the demandingness scale. Alpha scores for this group on the responsiveness measure ranged from .75 to .87, while alpha scores on the demandingness measure ranged from .68 to .83. While acceptable coefficient alpha scores they are not as good as Buri (1991), especially the demandingness measure.

Parental bond was measured by Chambers et al. (2000) using the Parental Bonding Instrument (PBI) which consists of two scales similar to responsiveness and demandingness – care and control. Respondents were asked to give their perceptions, using a 4-point Likert scale, to a variety of statements relating to their parents; each participant was asked to respond separately for mother and father. Each scale used by Chambers et al. (2000) in the shortened version of the PBI contained ten statements. The full version of the PBI contains 25 statements per scale. No internal consistency scores were given. Attachment also was measured by Walker et al. (2007) by looking at family closeness, parent attachment, and parent monitoring. Closeness was measured using a three-item scale that asked how often families do things together and how

much fun they had (α = .72). Attachment was measured using 11 items that asked how well the adolescent respondent got along with his parent or if he often felt angry towards his parent (α = .72). Monitoring was assessed through the use of a six-item scale that asked how often the respondent spoke with his parents and how many of his friends were known to his parents (α = .63). Walker et al. (2007) decided to combine their scales for "ease of interpretation" (p. 309), thus dubbing it a scale of parent attachment. Given the combined coefficient score of .56, unacceptable to DeVellis (2003), they may have been better off leaving the scales separate.

The authoritative parenting measure used by Simons et al. (2005) seemingly incorporated many of these other measurement items. Researchers who compiled the FACHS dataset, used by Simons and colleagues, collected caregiver responses to the 21-question authoritative parenting survey. Five of the questions were about parental monitoring, six were about consistent discipline, six were about inductive reasoning, two were about problem solving, and two were about positive reinforcement (Simons et al., 2005). The entire instrument had an alpha score of .75 during both waves of data collection (Simons et al., 2005).

The other studies examined in this section utilized a variety of different measures in their attempts to discern the link between parenting style and delinquent behavior. Palmer and Hollin (2001) looked at parenting through three scales – control mechanisms, guidance mechanism, and affective bond – each with a variety of subscales, including discipline, punishment, supervision, communication, attachment, and involvement. Alpha scores are not reported for any of the three scales or eight subscales (Palmer & Hollin, 2001). Paschall et al. (2003) also used many measures to study parenting style. Among these measures were a nine-item scale that examined maternal monitoring of son's behavior, a six-item scale that looked at perceptions of maternal control over their sons' behaviors, an 11-item scale examining mother-son communication, and a

16-item scaled the examined the relationship between mother and son (do they talk together, joke around, and have fun with each other).

Stattin and Kerr (2000) introduce a variety of reliable measures of parenting. As part of their parental monitoring scale, they asked adolescents nine questions relating to their parents' knowledge of their everyday life including homework and friends ($\alpha = .86$). Parental solicitation was a five-item measure that asked if parents would try to solicit information from their children ($\alpha = .77$) about their whereabouts and who they socialized with. Parental control used six items to examine if the adolescent respondents had to gain parental permission for going out and staying out late ($\alpha = .82$). Child disclosure measured the adolescents' willingness to disclose information about their lives to their parents without being prompted; this scale was created using five items ($\alpha = .81$). The alpha scores reported by Stattin and Kerr (2000) are more than acceptable, but they do not adequately capture the essence of authoritarian, authoritative, permissive and neglecting/rejecting parenting. Once again, after examining the internal consistency scores of each of the "parenting style" measures discussed above and how they relate to Baumrind's conceptualization of parenting styles it is apparent that the Buri's (1991) PAQ is the best tool for measuring Baumrind's typology of parenting styles.

Second, "delinquency" also was measured in a variety of ways. Simons et al. (2005) used the conduct disorder section of the Diagnostic Interview Schedule for Children, Version 4 (DISC-IV), which asks the respondent to self-report engagement in 26 acts including shoplifting, assault, vandalism, and burglary. They note that the alpha score for the data they used was above .90 at both waves (Simons et al., 2005). Steinberg et al. (2006) used two measures of delinquency: aggressive offending and income-related offending. The aggressive offending measure consisted of 11 questions that asked about such things as physically attacking another

person (α = .76) and the income-related offending measure consisted of 11 questions that asked about such things as taking property from another person (α = .74). The other studies undertaken by Steinberg and colleagues (Avenevoli et al., 1999; Steinberg et al., 1991, 1994) measured delinquency by asking respondents to self-report involvement in six activities, including theft, vandalism, and carrying a weapon (α = .82).

Hoeve et al. (2007) had different delinquent measures for each of the two studies that they analyzed. Researchers with the PYS measured robbery (pick-pocketing), gang activity, assault with a weapon, damaging private property, and petty theft. The CFNS study measured delinquency by asking respondents about participation in vandalism, theft, arson, fraud, assault, and sex offenses. Jackson et al. (1998) asked respondents if they carried, used, or threatened to use a weapon against somebody. Additionally, they asked if the participant had ever been involved in a physical fight. Similarly, Walker et al. (2007) asked respondents whether they had committed violent acts, including participating in gang fights, using weapons, and sexually assaulting another person. Palmer and Hollin (2001) measured delinquency using the 46-item self-reported delinquency scale developed by Elliott and Ageton (1980). The scale asks about delinquent acts committed within the past year and has a high test-retest reliability (r = .70 - .95).

Paschall et al. (2003) used a 12-item scale that asked participants if they had committed a number of different delinquent acts. Included in this measure were questions about brandishing weapons, using weapons in a fight, selling or using drugs and alcohol, and damaging another person's property. Stattin and Kerr (2000) asked about "normbreaking." Many of the nine items in this measure were similar to Paschall et al. (2003), including consumption of alcohol and drugs, damaging property, participating in fights, and stealing. An internal consistency score of .79 for delinquent behavior measures was reported by Stattin and Kerr (2000).

Empirical results of delinquent behavior studies. The data gathered by researchers investigating the link between parenting style and delinquent behavior are very similar to data from the problem behavior and deviance studies, but there are some interesting differences. As expected, the authoritative parenting style is associated with lower levels of reported delinquency in all cases (Avenevoli et al., 1999; Hoeve et al., 2007; Jackson et al., 1998; Palmer & Hollin, 2001; Paschall et al., 2003; Simons et al., 2005; Steinberg et al., 1991, 1994, 2006). Additionally, in studies that looked into permissive and neglecting/rejecting (Avenevoli et al., 1991; Steinberg et al., 1994, 2006), results suggested that those children were most likely to succumb to delinquent behavior. Surprisingly, Chambers et al. (2000), which sampled incarcerated offenders, suggested that the majority of respondents perceived their parents to be authoritarian; this result does not fall completely in line with prior research (discussed above and throughout) which has suggested that individuals who are most likely to display problem behaviors come from neglecting/rejecting homes.

Interestingly, however, are results from studies that measured and compared authoritarian and authoritative parenting style and the outcomes associated with each study (Avenevoli et al., 1999; Steinberg et al., 1991, 1994, 2006). When measuring delinquency outcomes, data suggest that there are a limited number of significant differences between authoritative and authoritarian parenting (Steinberg et al., 1994, 2006). As noted above, these studies measured delinquency similarly. The only instance of significant differentiation in this set of studies was seen by Steinberg et al. (2006) in their measure of income-related offenses, which suggests that children with authoritarian parents are more likely than children with authoritative parents to take money or belongings from somebody else without that person's knowledge. Delinquent behavior in children from both authoritative and authoritarian families saw similar declines in one-year

follow-ups according to Steinberg et al. (1994). Avenevoli et al. (1999), however, found that delinquency has a significant negative association with the authoritative parenting style, whereas there is a positive, albeit non-significant, relationship between delinquency and authoritarian parenting. Somewhat similarly, in addition to reporting a significant negative relationship between authoritative parenting and delinquency, Palmer & Hollin (2001) report that authoritarian parenting has a significant positive relationship with delinquency.

This builds on the Baumrind study (1972), which suggested that the authoritarian style of parenting is beneficial for African American daughters. Avenevoli et al. (1999) report that African American adolescents with authoritative families have a higher level of involvement in delinquent activities than their white counterparts, while African American children with authoritarian parents have lower levels of delinquent involvement than similarly situated white children. Seeing similar data, Steinberg et al. (2006, p. 56) opine, "thus it is not that authoritarian parenting is good for poor, urban, ethnic minority adolescents, but…authoritarian parenting *may not be as bad* [emphasis in original] for these adolescents as it has been shown to be for their middle-class, suburban, white counterparts."

Walker et al. (2007) reported interesting findings relevant to race. As noted, their measure of attachment included family closeness and parental monitoring. Their results suggest that the higher level of attachment that Hispanic youth have with their parents the more likely they are to revert away from delinquency. When looking at the effects that parental attachment had on African American adolescents, however, Walker et al. (2007) noted that medium levels of attachment led to the lowest levels of delinquency, while both low and high levels of attachment led to high levels of delinquency. Given that parental attachment is essentially a proxy for

authoritative parenting this result is somewhat surprising, but given the results of Avenevoli et al. (1999) and Steinberg et al. (2006), not wholly unexpected.

Differences in delinquency levels between children from authoritarian and permissive families were minimal and not significant (Avenevoli, et al., 1999; Steinberg et al., 1994, 2006). The greatest differences in delinquent behavior were seen in children from neglecting/rejecting families. Children from neglecting/rejecting families engaged in significantly more delinquent behavior than children from authoritative families on all measures (Avenevoli et al., 1999; Steinberg et al., 1994, 2006). These significant differences occurred between neglecting/rejecting and the other parenting styles on all other measures other than the aggressive offenses measure in Steinberg et al. (2006). Thus, children from neglecting/rejecting homes did not differentiate significantly from children with authoritarian and permissive parents in terms of their levels of aggressive and assaultive behavior (Steinberg et al., 2006).

Stattin and Kerr (2000) reported one final set of findings. In line with the majority of empirical results presented in this section, Stattin and Kerr (2000) note that high levels of parental monitoring, control, solicitation, and child disclosure have a significant negative relationship with reported delinquent behavior. Interestingly, they also suggest that parental solicitation of their children's whereabouts is related to higher levels of delinquency than when children disclose their whereabouts without being prompted. It can be assumed that child disclosure is relatively synonymous with the notion of autonomy. Simply, authoritative parents allow their children to have autonomy, whereas authoritarian parents do not. Thus, it can be argued that authoritative parents rely more on child disclosure, while authoritarian parents may be more likely to solicit the information. This argument seems to make the most sense. Sadly,

Stattin and Kerr (2000) fail to make that argument. The next section examines if these delinquent tendencies transform into criminal behaviors.

Criminal behavior. The previous sections have examined the link between parenting styles and adolescent problem behaviors, deviance, and delinquency. This section addresses the limited empirical data that has been gathered about the parenting style-criminal behavior link. It is somewhat surprising that a limited number of studies have specifically examined this link because parenting, in general, is correlated with delinquent and criminal outcomes in children. But, Baumrind's typology has been largely ignored in criminological literature. Similar to previous sections, this section discusses the research methodology and empirical results of studies that have examined the link between parenting style and criminal behavior (also see Appendix D).

Methodology of criminal behavior studies. The first study of three that have examined the link between parenting style and criminal behavior was conducted by Schroeder et al. (2010). In order to conduct their research, Schroeder and colleagues did a secondary data analysis using data collected by Cernkovich, Giordano, and Pugh (1985). Data were collected in 1982 (n = 942) and 1992 (n = 721) from the same modified probability sample of respondents (Schroeder et al., 2010). The average age of the participants during the second wave of data collection was 25 and the sample was 45% male and approximately 47% Caucasian (Schroeder et al., 2010). Additionally, respondents were asked to complete self-reports questionnaires that asked about their criminal histories and their perceptions of parents' parenting styles.

In addition to asking participants to self-report their level of criminal involvement, Schroeder et al. (2010) also utilized two parenting style scales. As discussed above, Baumrind's four typologies result from two parenting classifications, demandingness and responsiveness

(Maccoby & Martin, 1983; Simons et al., 2004). The demandingness scale used by Schroeder and colleagues included seven items that asked respondents if their parents wanted to know where they were and who they were with, among other things, while not at home (α= .77). The responsiveness scale that Schroeder et al. (2010) used included 10 items that asked participants about their parents' affection and trust towards them (α = .68). Again, the internal consistency scores of these measures are not as desirable as those garnered by Buri (1991) when testing the PAQ.

The second study that examines the parenting style-criminal behavior link (Palmer & Gough, 2007) has many similarities with the proposed study. Palmer and Gough separated their respondents into three groups (person offenders, property offenders, and non-offenders). Twenty young (19.45-years-old) male offenders who had been convicted of assault, rape, and/or threatening behavior, among other offenses, comprised the group of person offenders, while twenty young (19.2-years-old) male offenders who had been convicted of burglary, vandalism, and/or arson, among other offense, comprised the group of property offenders (Palmer & Gough, 2007). The group of non-offenders was comprised of 31 young (19.27-years-old) males. The 71 participants were asked to self-report their criminal histories and their perceptions of their parents' parenting styles. Palmer and Gough (2007) note the small sample size and their inability to generalize their findings to larger populations. As stated, the proposed study is very similar, yet with a larger sample, thus generalizability should not be as big a concern.

Palmer and Gough (2007) also stray from the PAQ in their measurement of parenting styles. Instead, they used an abbreviated version of the Egna Minnen Barndorms Uppfostran (EMBU) scale, which measures rejection, emotional warmth, and overprotection, and provides separate scores for the mother and the father (Palmer & Gough, 2007). It appears that the

rejection scale is a proxy for the measurement of the rejecting/neglecting parenting style, the emotional warmth scale is used to measure the authoritative (or even permissive) parenting style, and the overprotection scale is a measurement of the authoritarian parenting style. The rejection scale consisted of six items, the emotional warmth scale consisted of seven items, and the overprotection scale consisted of ten items; higher scores on each scale suggested higher levels of perceived rejection, warmth, and parental control (Palmer & Gough, 2007). Internal consistency scores were not reported, but research (Muris, Meesters, & van Brakel, 2003) using the EMBU has reported alpha scores ranging from .66 (maternal overprotection) to .81 (paternal emotional warmth), thus suggesting that the EMBU has internal reliability scores that, again, are not on par with the PAQ.

The third study, Haapasalo (2001), surveyed 89 male Finnish offenders. These participants were randomly selected from one of five prisons in Finland. The 89 men averaged 20 years of age and the mean number of convictions amongst the group was eight. The criminal offenses that these men were convicted of ranged from minor summary-type offenses to serious and violent crimes (Haapasalo, 2001). Once again, the small sample size presents concerns with generalizability of the findings.

Haapasalo (2001) conducted research using the Child Report version of the Parent Behavior Inventory (PBI). This version of the PBI included 108 items (grouped into 18 subscales) that asked participants about their parents' behaviors and attitudes. The original version of the PBI included 192 survey items (28 subscales) with an internal consistency score of .76 (Haapasalo, 2001). Again, based on results reported by Buri (1991), the PAQ appears to be a stronger measure of distinct parenting styles.

Empirical results of criminal behavior studies. Studies examining the link between parenting style and adult criminal behavior suggest that those who report being parented by authoritative parents are the least likely to engage in criminal behavior (Schroeder et al., 2010). Given the pattern of results in research that focused on youth behavioral problems, deviant behavior, and delinquency, this is not a surprising result. On the other hand, it is somewhat surprising that the neglecting/rejecting parenting style is not significantly associated with higher levels of offending (Palmer & Gough, 2007; Schroeder et al., 2010). This section provides further analysis of these results.

Schroeder et al. (2010) suggests that those who perceive their parents as permissive are significantly more likely to engage in criminal behaviors at a level higher than those who report any of the other three parenting styles. Surprisingly, no style of parenting is significantly associated with criminal offending amongst white respondents, though the authoritarian style is associated with higher levels of offending by whites (Schroeder et al., 2010); white respondents with authoritarian parents are more likely than those with permissive or neglecting/rejecting to be involved in crime. Differences are reported by African American respondents, which suggest that African Americans with permissive parents are significantly more likely than respondents of other races to be involved in crime (Schroeder et al., 2010). This is closely followed by African American respondents with neglecting/rejecting parents who are significantly likely to engage in criminal activity; respondents with authoritative and authoritarian parents report the fewest criminal behaviors (Schroeder et al., 2010). These results suggest that parenting style may have a different effect on African Americans than Caucasians with regard to criminal activity.

Palmer and Gough (2007) report data that both agrees with and deviates from data reported by Schroeder et al. (2010). As mentioned above, no significant differences exist

between property, person, and non-offenders who claim that their parents were neglecting/rejecting. In addition, there are no significant differences between property, person, and non-offenders who perceived their parents as authoritarian; this is similar to Schroeder et al. (2010). There are significant differences, however, between the levels of offenders and perceived maternal or paternal authoritative parenting. Mothers of person offenders were significantly less likely to display authoritative tendencies than mothers of property and non-offenders; level of maternal authoritativeness was similarly reported by both property offenders and non-offenders (Palmer & Gough, 2007). Paternal authoritativeness, though, was significantly higher among non-offenders than both person and property offenders. The data regarding authoritative mothers is interesting because it is the first to suggest that some offenders and non-offenders were subjected to similar levels of authoritative parenting. Again, the sample size in the Palmer and Gough study limits the generalizability of the findings, thus this may represent an outlier.

The results of Haapasalo (2001) also may have limited generalizability due to sample size and geographic placement. Haapasalo (p. 115) suggests that "parenting appeared to be manifested in the dimensions of maternal and paternal rejection." While not described as having a lack of demandingness and responsiveness that typifies the neglecting/rejecting parenting style, rejecting parents in Haapasalo's study were described as rejectors (selfish, detached, and against child autonomy) and aggressive (physically and psychologically abusive). Despite its limitations, this study is relevant because the majority of incarcerated respondents report that their parents were neglecting/rejecting. When considering the empirical findings of the behavioral, deviant, and delinquent studies discussed above it makes sense that criminal offenders retrospectively report that their parents governed according to the neglecting/rejecting style of parenting. Given the variety of reported perceptions by those who have participated in the limited number of

studies examining the link between parenting style and criminal behavior, the current study is an attempt to shed necessary light on an under-studied relationship. The next section: discusses how the current study is related to the empirical literature, provides justification for the current study, and assesses the current study's relevance to the field of criminology.

The Current Study

This study sought to integrate the prior literature in a way that has not been done before. Simply, the researcher desired to examine the relationship between Baumrind's four parenting typologies and level of deviant, delinquent, and criminal involvement. As seen above, multiple studies have looked at one type of behavior when assessing the impact of parenting on that behavior, but none have included all of them. The following sections discuss how the current study related to the prior literature while providing a justification for conducting the research. This section concludes with an argument that explains why it was necessary to integrate a typology from the discipline of psychology with the field of criminology.

Relationship to Prior Literature and Justification for Study

Past empirical examinations have assessed the impact that parenting has had on various problem, deviant, delinquent, and criminal behaviors. It appears that the most favorable and least problematic behaviors in participants are related to the authoritative style of parenting. At the other end of the spectrum, it seems that the least favorable and most problematic behaviors are associated with the neglecting/rejecting style of parenting. While prior literature has been an important source of information for researchers studying the link between parenting style and behavior, it also has noticeable gaps. This study sought to fill in some of these gaps.

First, like many of the studies discussed above, the current research asked respondents to self-report their perceptions of their parents' parenting styles. Unlike the prior research, however,

respondents were able to report on the person who fulfilled the role of their caretaker (for example: biological parent, step parent, foster parent, adoptive parent, or grandparent). As seen in numerous studies (Paschall et al., 2003; Paulussen-Hoogeboom et al., 2008; Querido et al., 2002), the main caretaker/parental figure varies between the biological parent, grandparent, stepparent, foster parent, and aunt/uncle. Despite this variation, no research has sought to explain how the differences in main caretaker affect the children's behavioral outcomes. The proposed study sought to examine this gap, though there was not be enough variation in caretaker type to perform a complete analysis.

Second, the previous research has rarely sought the opinion of young adults when examining this relationship. Of the literature being scrutinized above, only five studies (Chambers et al., 2000; Haapasalo, 2001; Palmer & Gough, 2007; Patock-Peckham & Morgan-Lopez, 2007; Schroeder et al., 2010) ask young adults their perceptions of their parents' parenting styles, while the majority relies upon the opinions of adolescents or subjective observations of researchers. It was the opinion of this researcher that young adults (college-aged and older) would be able to make better-informed assessments of their parents' parenting based on the accumulation of life experiences or of becoming parents themselves.

Third, few studies have examined the link between deviant/delinquent/criminal involvement and parenting by accessing individuals in correctional settings; this is a somewhat obvious gap given the lack of adults used in prior research. Of the three studies to directly survey inmates, two were conducted in Europe (Chambers et al., 2000; Haapasalo, 2001), thus suggesting a need to examine this link not only using those incarcerated, but also using inmates in the U.S. Additionally, both studies that took place in Europe relied solely on incarcerated respondents, whereas the sole U.S.-based study (Palmer & Gough, 2007) compared criminal

offenders to non-criminal offenders. Given that there is one U.S.-based study examining the link between parenting style and criminal behavior that utilizes responses from offending and non-offending samples it is an understatement to say that there is a lack of research about the topic.

Fourth, few differences between male and female respondents have been reported in the prior research. However, when reported the differences are profound. In addition, a handful of studies have noted different outcomes for white, Hispanic, and Black respondents. These race-based differences suggest that children of different races have contrasting reactions to similar parenting styles. The current study attempted to add to this literature, though limited racial variation did not allow a complete analysis.

Fifth, a plethora of researchers have attempted to construct measurement instruments to accurately and consistently measure perceptions of Baumrind's parenting types, and parenting styles in general. For the most part, these instruments have been proven as reliable and valid. But, it can be argued that there exists a need for a universal measure of parenting style. The PAQ (Buri, 1991) represents a suitable starting point, but pilot research (discussed below) has extended the PAQ to include neglecting/rejecting parenting behaviors and the current study used a shortened version of this extension. The implementation of a universal measure that retains reliability and validity when shortened represents an important addition to the study of the parenting-child behavior relationship.

Relevance to the Field of Criminology

As a psychological perspective, Baumrind's typology of parenting styles has yet to receive its due diligence within the field of criminology. This gap in research is supported by the lack of empiricism surrounding Baumrind's typology in criminological circles, while

Gottfredson and Hirschi's (1990) self-control theory of crime causation (and parental management) has received widespread attention within the field (Akers & Sellers, 2009).

Essentially, Gottfredson and Hirschi (1990) argued that parental management consists of three distinct parts: monitor child behavior, recognize deviant behavior, and apply appropriate punishment. The authors suggested that children will revert from deviant/delinquent/criminal behavior if they have parents who meet each of the three criteria. Given the similarity of Baumrind's typology to the main tenets of parental management and self control proposed by Gottfredson and Hirschi, it is argued that the typology deserves empirical examination through a criminological lens.

Pre-Test of Parenting Style Measures

As stated above, this study used the PAQ (Buri, 1991) in order to determine the parenting style used by each respondent's parent(s). Buri's instrument contained 60 total items – separated into 30 per parent – that were used to assess authoritarian, authoritative, and permissive parenting. Missing from the original PAQ, however, were items testing for Baumrind's fourth parenting type, neglecting/rejecting. In order to perform a complete test of Baumrind's parenting typology it was imperative that all four styles were included in the analysis. Thus, 20 items (10 per parent) were created in an effort to assess the neglecting/rejecting typology. The 10 items measuring maternal neglecting/rejecting behavior are presented in Table 3; the 10 items measuring paternal neglecting/rejecting behavior are similar, but the word "father" appears in the place of "mother" and all gender-based pronouns reflect that change. The following section outlines the reasons for conducting the pre-test, the methodology used to gather data, and discusses the findings.

Justification for Pre-Test

Again, in order to properly assess the relationship between Baumrind's Typology of Parenting Styles and level of deviant, delinquent, or criminal involvement, one must measure each of the four typologies. Although the PAQ has proven to be a reliable and valid measure of Baumrind's typology (Buri, 1991), it fails to account for 25% of the proscribed parenting styles. Thus, it was necessary for the researcher to develop, and subsequently test, questionnaire items that probe respondents' perceptions of the neglecting and rejecting aspects of the parenting methods used by their mothers and fathers. Furthermore, the researcher decided that it would be unwise to utilize untested survey items for such an important part of the dissertation research. Based on these very simplistic, yet highly important reasons, a pre-test was conducted in order to determine the internal consistency and inter-correlations of items included in the maternal neglecting/rejecting and paternal neglecting/rejecting scales.

Table 3: *PAQ Extension – Items Measuring Maternal Neglecting/Rejecting*

Statement No.	Statement
S4 (MomNeg1)	While I was growing up, my mother did not make any rules and showed no desire to do so
S8 (MomNeg2)	Even when I did something wrong to get my mother's attention, she didn't respond to me
S10 (MomNeg3)	As I was growing up, I had no idea what my mother expected of me
S14 (MomNeg4)	My mother never gave me any guidance as I was growing up
S17 (MomNeg5)	I feel like I raised myself more than my mother raised me
S20 (MomNeg6)	I don't know my mother's views about discipline because she never communicated them with me

S24 (MomNeg7)	As I was growing up, I could do whatever I wanted and my mother didn't care
S27 (MomNeg8)	I did not learn discipline from my mother
S33 (MomNeg9)	I did not learn effective communication skills from my mother
S39 (MomNeg10)	For the most part, my mother ignored me as I was growing up

Methodology

The entire pre-test survey instrument was loaded into Qualtrics, a web-based software interface which allows researchers to upload questionnaires and distribute them electronically via email to potential respondents. The researcher was given a list of 3,500 email addresses for undergraduate students at one university in the northeast; this list was randomly generated by the director of the Applied Research Lab (ARL) at the University. Prior to distributing the email to the 3,500 potential respondents, the researcher copied the informed consent form for the pre-test and the electronic link to the survey into the Qualtrics email interface.

The random sample of potential respondents were able to access the survey instrument for approximately five weeks, during which time the researcher sent four reminder emails to those who had not responded. Of the 3,500 undergraduate students who received an invitation to complete the survey, only 447 accessed it (12.77%). Out of those 447 participants, 306 responded to each statement relating to the permissive style of mothers, 304 responded to each statement relating to the neglecting/rejecting maternal style, 301 responded to all maternal authoritarian items, and 298 responded to the all of the authoritative measures for mothers. As for the paternal measures, each scale received 195 completed responses.

The low response rate is a bit disconcerting and there are likely several factors that impacted this. First, the survey was initially distributed immediately before the Easter holiday when the weather was first beginning to turn nice, thus it is understandable why young college students failed to respond. In addition, one set of reminder emails was sent out with two weeks remaining in the semester and the final reminder was sent out prior to final exam week. Given that the timing of the initial invitation and reminders was very close to the end of the semester when students are preparing for final exams it is not surprising that more people chose to not participate. Finally, it is important to consider how dynamic response rates are in survey research and how response rates are influenced by mode of delivery and respondent population (Dillman, Smyth, & Christian, 2009). Dillman et al. (2009) report a variety of response rates based on the mode of survey dissemination; this suggests that Internet and e-mail surveys are likely to receive lower response rates than mail and face-to-face surveys. Additionally, Dillman et al. (2009, p. 10) suggest that the young adult demographic "is probably the most difficult group to get to respond to surveys by any mode." In order to improve upon this response rate in the dissertation project the researcher implemented Dillman and colleagues' (2009) method for web-based surveys. Despite, the issues mentioned, it is important to note that the number of completed surveys is sufficient for completing the planned analysis.

Demographically, the respondents averaged 21.8 years of age, were 75% female, and 85% white. It appears women are overrepresented in the sample, as the University's student population is 56% female, but the breakdown between white and non-white respondents is very similar to the University, whose student body is 87% white ("Facts about IUP," n.d.).

Results

In assessing the data, multiple aspects were examined. First, the researcher wanted to determine if the scale items for neglecting/rejecting parenting were reliable. Second, the researcher wanted to assess the reliability of Buri's (1991) original six scales. Finally, the researcher wanted to assess the intercorrelation scores of the eight extended measures and determine if they were comparable to Buri's original six scales given the introduction of the maternal and paternal neglecting/rejecting scales.

Test of internal consistency. The overriding reason for conducting this initial test of the survey instrument was to examine the internal consistency of the new measures for the maternal and paternal neglecting/rejecting parenting styles. The Cronbach alpha scores for Buri's initial test are discussed above and included in Table 4 below. As discussed, Buri's scales can be characterized as "respectable" and "very good" when using DeVellis' (2003) criteria for assessing measurement scales. The Cronbach alpha scores attained in the pre-test were very similar across all of the original six scales when compared to the outcomes Buri experienced: .85 for Mother's Authoritarianism, .88 for Mother's Authoritativeness, .80 for Mother's Permissiveness, .88 for Father's Authoritarianism, .91 for Father's Authoritativeness, and .79 for Father's Permissiveness. As seen, the reliability scores for these six scales are slightly higher than the alpha scores attained by Buri during his original reliability tests.

It is possible that the slightly higher alpha scores can be explained by minor changes that this researcher made to the PAQ statements. For example, a statement measuring maternal authoritativeness in the PAQ reads, "As I was growing up my mother directed the activities and decision of the *children* [emphasis added] in the family through reasoning and discipline" (Buri, 1991, p. 113). The same statement was amended for the pre-test to read, "As I was growing up

my mother directed the activities and decisions that I made through reasoning and discipline." It is the opinion of the researcher that this minor difference changed the scope of the statement from a general parenting behavior applicable to all children in the family to a more specific behavior geared solely towards the individual evaluating the statement. Thus, the respondents were able to agree or disagree with the statement based completely on their subjective interpretations of their parents' behavior, which may explain the slight increases in reliability scores.

Aside from similar reliability scores for the six existing measures, the results of the pre-test suggest that the scales for maternal and paternal neglecting/rejecting behavior also are respectable and very good. As displayed in Table 4, the coefficient alpha value for Mother's Neglect/Rejection was .86 and the alpha value for Father's Neglect/Rejection was .90. These alpha values, both for the existing measures and new measures, suggest that the PAQ and the extension scales are very solid, and the scales were more than acceptable to use in order to determine perceptions of parenting styles in the current study.

Table 4: *PAQ Extension – Internal Consistency of Scales*

	Buri (1991) α	Spraitz Extension α
Mother's Authoritarianism	.85	.85
Mother's Authoritativeness	.82	.88
Mother's Permissiveness	.75	.80
Mother's Neglect/Rejection	-	.86
Father's Authoritarianism	.87	.88
Father's Authoritativeness	.85	.91
Father's Permissiveness	.74	.79
Father's Neglect/Rejection	-	.90

Test of discriminant validity. As Buri (1991) suggested, if each of the scales were accurate measures of Baumrind's typology then participants should provide divergent responses

to each of the items. For example, items measuring the strict disciplinarian parent (authoritarian) who is likely to demand a lot, yet communicate little, should diverge from items measuring the parent who guides a child through life explaining the rules and reasons for the rules (authoritative). In addition, items measuring permissive parents who are lax disciplinarians, yet friendly with their children, should diverge from authoritarian and authoritative measures. Each of these parenting types display different characteristics, thus it is important that these differences are accounted for in the measurement instrument.

Results from Buri (1991) supported the notion of divergence (see Table 5). Simply, maternal authoritarianism was inversely and significantly related to maternal authoritativeness and maternal permissiveness, and paternal authoritarianism was inversely and significantly related to paternal authoritativeness and paternal permissiveness (Buri, 1991). Additionally, neither maternal nor paternal permissiveness and authoritativeness were related significantly to each other (Buri, 1991).

Table 5: *Intercorrelations of PAQ Scores*

	1	2	3
1 Mother's Authoritarianism	1.00		
2 Mother's Authoritativeness	-.48*	1.00	
3 Mother's Permissiveness	-.38*	.07	1.00
	4	5	6
4 Father's Authoritarianism	1.00		
5 Father's Authoritativeness	-.52*	1.00	
6 Father's Permissiveness	-.50*	.12	1.00

SOURCE. – Adapted from Buri (1991)
*$p \leq .0005$

As expected, pre-test results of the intercorrelation scales for the original PAQ items mirrored Buri's results (see Table 6). As seen in the table, the newly introduced

neglecting/rejecting scale is intercorrelated with the other scales similarly across both the maternal and paternal measures. Simply, the neglecting/rejecting scale is positively and significantly related to the permissive scale, inversely and significantly related to the authoritative scale, and inversely and not significantly related to the authoritarian scale. These results present interesting insight into the relationships between parenting types and the constructs of demandingness and responsiveness.

First, and as expected, the scales for parenting types that do not share similar levels of both demandingness and responsiveness (authoritarian-permissive; authoritative-neglecting/rejecting) were inversely and significantly intercorrelated. Because neither of these two pairs of parenting types have anything in common with each other it is assumed that scales constructed to measure them should diverge from each other; this assumption is supported by the findings.

Table 6: *PAQ Extension – Intercorrelation Scores*

	1	2	3	4
1 Mother's Authoritarianism	1.000			
2 Mother's Authoritativeness	-.353*	1.000		
3 Mother's Permissiveness	-.544*	.107	1.000	
4 Mother's Neglect/Rejection	-.084	-.594*	.448*	1.000
	5	6	7	8
5 Father's Authoritarianism	1.000			
6 Father's Authoritativeness	-.350*	1.000		
7 Father's	-.543*	.020	1.000	

Permissiveness				
8 Father's Neglect/Rejection	-.031	-.602*	.538*	1.000

*$p \leq .01$

Second, the scales for parenting types that share similar levels of demandingness (authoritarian-authoritative; permissive-neglecting/rejecting) were significantly intercorrelated, but in opposite directions. As discussed earlier, authoritarian and authoritative parents share high levels of demandingess. The scales for these parenting types were inversely related to each other, while the scales for permissive and neglecting/rejecting (shared low levels of demandingness) were positively intercorrelated with each other.

At the same time, the scales for parenting types that share similar levels of responsiveness (authoritarian-neglecting/rejecting; authoritative-permissive) were not significantly intercorrelated. Again, authoritarian and neglecting/rejecting parents share low levels of responsiveness; the scales for these parenting types were inversely intercorrelated. Authoritative and permissive parents share high levels of permissiveness and the scales for each are positively intercorrelated.

These results suggest a number of things. First, shared levels of demandingness, whether high or low, have a greater and more significant impact than shared levels of responsiveness when assessing intercorrelations. Second, findings suggest that parents who share similar strong patterns of discipline, but engage in differing levels of communication with their children are more different from each other than parents who engage in differing levels of communication and employ similar levels of lax discipline. It can be argued that respondents perceived over-bearing parents who talked with them differently than over-bearing parents who did not talk with them, yet perceived little difference between less demanding parents whether or not they

communicated with them. Third, despite non-significance, results suggest that respondents perceived communicative parents similarly despite differences in disciplinary techniques, whereas non-communicative parents with differing methods of discipline were perceived differently. Thus, it appears that the demandingness construct is more important than responsiveness in assessing perceptions of parenting style.

Despite the significant positive relationship between the neglecting/rejecting and permissive scales, it is a generally accepted rule that discriminant validity exists if the correlation value is less than .85 (John & Benet-Martinez, 2000). The intercorrelation values of .448 between the maternal scales and .538 between the paternal scales fall below this threshold.

Conclusion

Buri's (1991) original PAQ scales of maternal and paternal authoritarianism, authoritativeness, and permissiveness continue to be supported, as suggested by the results of the pre-test. The new scales, maternal and paternal neglecting/rejecting, also appear to be both reliable and valid measures of Baumrind's fourth parenting type. The addition of these two scales proved to be useful to the current study in the short term, and should be useful to the continued study of the relationship between parenting style and child behavior in the long term.

CHAPTER III

METHODOLOGY

This study utilized a cross-sectional design. A quantitative self-report survey instrument was administered to two distinct sample groups of respondents (incarcerated individuals and university students) in order to examine the relationship between perceptions of parenting style and level of deviant, delinquent, and criminal involvement. The following chapter details the overall research design, site and sample selection (beginning with the incarcerated sample), the survey methodology, reliability and validity, human subject protections, and limitations and strengths of the design. First, however, the research questions and hypotheses of the current study are introduced.

Research Questions and Hypotheses

Using the two sample groups from each site mentioned above, the current study sought to answer the following research questions:

1. What parenting style is the most likely to be reported by the respondents?
2. When looking at the entire sample, which parenting style will best predict reduced deviant, delinquent, and criminal involvement; which parenting style will best predict increased deviant, delinquent, and criminal involvement?
3. How will the impact of different parenting styles on the level of deviant, delinquent, and criminal behavior compare across sample groups?
4. What impact does the sex of the respondent have on the relationship between parenting style and level of deviant, delinquent, and criminal involvement?
5. What impact does race have on the relationship between parenting style and level of deviant, delinquent, and criminal involvement?

Based on the empirical research discussed in earlier chapters and the research questions outlined above, this study analyzed the following hypotheses (with corresponding research question in parentheses):

H_1 (1): The authoritative parenting style will be the most reported style of parenting for both maternal caretakers and paternal caretakers.

H_2 (2): The authoritative parenting style will be the most significant predictor of reduced involvement in deviance, delinquency, and crime; the neglecting/rejecting parenting style will be the most significant predictor of increased involvement in deviance, delinquency, and crime.

H_3 (3): Authoritative parenting will have the most significant effect on the behaviors of the university students; neglecting/rejecting parenting will have the most significant effect on the behaviors of the county jail inmates.

H_4 (4): Female and male respondents will be affected similarly when parented with the same parenting style.

H_5 (5): Non-white and white respondents will be affected similarly when parented with the same parenting style with the exception of the authoritarian style; non-white respondents will be less likely than white respondents to engage in deviant, delinquent, and criminal behaviors when parented by an authoritarian parent.

Site Selection

The current study gathered data from three different sites – two county jails in one northeastern state and one state university in the northeast. The following sections discuss each of these different sites.

County Jail #1

The first county jail is located in a rural area, and is under the purview of its county's prison board, which is comprised of the Presiding Judge of the Court of Common Pleas, the district attorney, the sheriff, the controller, and the county commissioners (61 Pa.C.S.A. § 1731, 2009). This county is home to approximately 87,500 people, roughly 82% of whom are over the age of 18 (U.S. Census Bureau, 2010). The county jail houses 256 beds for male and female inmates. According to the jail Warden, the jail may hold up to 40 inmates from any of the State Correctional Institutions located within the state's Department of Corrections (DOC); state inmates were not be eligible to participate in this study because the DOC was not allowing access to prisoners for research purposes at the time data was gathered.

County Jail #2

The second county jail is located in an urban area, and is under the purview of its county's bureau of corrections. This county is home to roughly 1.2 million people, approximately 80% of whom are over the age of 18 (U.S. Census Bureau, 2010). The jail houses over 2,000 men and women on any given day (Allegheny County Pennsylvania, n.d.). These individuals are housed for a variety of reasons, "[A]pprehended fugitives, persons who had bonds revoked, persons who have been sentenced to Jail at Court, Parole or Probation violators" (p. 1). Additionally, inmates are delivered to the jail by local police, county sheriffs, state troopers and constables, as well federal authorities. One can assume that this mixture of reasons for apprehension and apprehending agency suggests that the level of criminal involvement by inmates at this jail is extremely varied; likewise, one can assume that the level of criminal involvement at the rural county jail equally is varied. Thus, it was argued that the two jails were ideal locations to conduct research.

The University

The University is a four-year university located in a northeastern state. It is the largest university affiliated with its state's higher education system with an enrollment of 14,638 students during the Fall 2009 semester ("Facts about IUP," 2009). Of the 14,638 students, 44% are male, 87% are Caucasian, 92% are traditional college-aged, and 12,291 are undergraduates. In addition, the student body hails from 47 states, 3 U.S. territories, and 72 countries, thus suggesting the possibility of constructing a very diverse sample for the study.

Sampling and Survey Administration

As stated, the current research intended to sample two groups in an effort to discern the effects that perceived parenting styles have on levels of deviant, delinquent, and criminal involvement. The first sample included men and women incarcerated in one of the two jail facilities discussed above. The second sample consisted of university students currently taking courses. Due to concerns regarding the accessibility of inmate populations, the researcher employed multiple sampling procedures. The following discusses the sampling procedures necessary to establish both an inmate and university student sample.

County Jails

Given the transient nature of jail populations, the researcher had little choice but to use the non-probability sampling technique of availability sampling for the inmate sample. According to the urban county jail website (n.d.), the facility oversees roughly 350 in-out/out-in movements each day. Included in these movements are recently arrested individuals, those who cannot post bail, and those delivered to the jail by a variety of law enforcement agents, as discussed above. Additionally, there is daily movement of inmates to and from court proceedings. Once again, the volume of movement and uncertainty regarding which inmates

would have been present when the researcher administered the survey suggested that the best way to procure an inmate sample was to use an availability sample.

Bachman and Schutt (2010) suggest that availability sampling is appropriate when a researcher is attempting to study perceptions of a particular population. Therefore, availability sampling was appropriate based on the notion that the researcher was attempting to study the inmates' perceptions of their parents' parenting style. In order to secure this sample, the researcher met with the Warden and Deputy Warden of the rural county jail, and one of the Deputy Wardens of the urban county jail. During these meetings, the researcher outlined the study, allayed any concerns that the jail administration may have had regarding safety and interference with jail operations, and promised to keep the Deputy Warden updated with the progress of the research. Jail administrators at each site assured the researcher that access to the jails would be granted. The researcher completed and submitted institutional clearance paperwork for access to each jail.

In order to secure participation from inmates at the rural county jail, the researcher received a list of all county inmates in the facility (state inmates housed in a county facility were not available for research given the DOC's moratorium on outside research) from the deputy warden on each day that research was conducted. The researcher announced the study to inmates assembled in the common area of each housing unit/pod. County inmates interested in participating were asked to meet with the researcher in an activity room located within each housing unit. The Deputy Warden of the rural county jail allowed access to an activity room within each housing unit as a secure place to administer the surveys. The researcher met with inmates in the urban county jail on one occasion. The nature and purpose of the study was explained to inmates in two housing units in the urban jail. The survey was group-administered

to interested participants in each housing unit. The researcher began all meetings by reading aloud the informed consent form to the participants (see Appendix E); participants were invited to keep a copy of this form. After consent was agreed upon, the researcher read each of the questions or statements to the entire group while allowing adequate time for the participants to respond. In all instances, the participants did not want the researcher to read the questions aloud. The researcher also emphasized that the respondents should ask for clarification when a statement or question was confusing. Participants were able to withdraw at any time by writing "withdraw" on the survey; most exited the area in which the survey was being administered upon indicating their desire to withdraw. At the completion of the questionnaire, the researcher collected all survey instruments (whether complete or incomplete) and exited the housing unit.

The University

As discussed above, the study included a sample of undergraduate students. The survey administration to this sample differed from the survey administration to the incarcerated sample. In order to generate the sample of university students, the researcher discussed the scope of the project with the coordinator of the ARL at the University who then created a randomly generated list of 2,000 undergraduate email addresses. The email addresses and survey instrument were uploaded into the Qualtrics, Inc., survey interface, available through the University at https://iup.qualtrics.com/ControlPanel/.

On one Monday morning in late October 2010 an email was sent to all randomly selected survey participants. The email message explained the scope of the project, the voluntary nature of participation in the project, and an active hyper link to the questionnaire. Once the participants clicked the hyper link they were directed to the survey instrument on the Qualtrics website. To reinforce the fact that their participation was voluntary, the informed consent form was visible on

the first page (see Appendix F). Participants were not able to proceed with the survey until they clicked on an icon indicating that they agreed with the informed consent. Once the participants completed the survey the results were stored in the researcher's Qualtrics account.

In order to increase the response rate for the electronic portion of the study, the researcher employed tactics for web survey implementation outlined by Dillman et al. (2009). First, the researcher used multiple contacts. As stated, the survey initially was sent to the email accounts of everybody in the sample on one Monday morning in late October 2010. Dillman et al. (2009) suggest that there is a greater likelihood of web-based survey completion if the respondents receive the link on a Monday morning as opposed to any other time of day. Reminder emails were sent on each of the four successive Mondays to those who had failed to access the survey. The interface kept track of users who accessed and completed the survey and did not send reminder emails to those who already had participated; the researcher, however, could not access this information and did not know the identities of those who had participated, thus ensuring the anonymity of the respondents.

Second, Dillman et al. (2009) suggest that the researcher send a token of appreciation to all potential respondents. Because the researcher wanted the respondents to retain anonymity during this project, complying with this tactic was not feasible. However, the researcher offered anybody who completed the entire survey an opportunity to be entered in a raffle to win one of four $25 gift cards to the Co-op Store at the University. In order to do this, the researcher asked the respondents if they would like an opportunity to win a gift card. If they did, they were asked to click "yes" before submitting the completed survey to Qualtrics. Respondents who clicked "yes" were diverted to another screen on which they entered their names and email addresses;

information from this form was kept separate from survey responses. The identity of the four raffle winners was known only to the researcher once the raffle was complete.

Another tactic employed to increase participation was to carefully select the subject line of the email soliciting participation. Dillman et al. (2009) suggest that the subject line should indicate that the email is about a survey sponsored, in part, by the university. The topic of the survey also should be apparent by the email title; the email title read "[University] Student Survey – Seeking Your Opinions About Parenting." Fourth, instructions for accessing the survey and a hyper link to the survey were clearly provided within the text of the email. Fifth, and as briefly mentioned above, once the respondents accessed the survey the first thing they saw was notification that they were in the right place and a reminder that their participation was voluntary before they clicked to begin the survey.

The researcher believes that the implementation of these web-based survey techniques helped increase the number of completed surveys from the sample of university students when compared to the number who completed the pre-test. Use of some of these techniques may help solidify some of the web-based parameters of Dillman and colleages' (2009) tailored design method.

Survey Instrument

The current study called for the examination of the relationship between perceived parenting styles and deviant, delinquent, and criminal outcomes. Unlike past research which has studied the relationship between parenting style and negative behavioral outcomes in young children using participant observation or adolescents using self-reports (see Literature Review), this study sought self-reports from adults in two sample groups. The survey questionnaire asked the respondents to report on their perceptions of parents' parenting style, other questions related

to parenting, their own deviant, delinquent, and criminal history, and basic demographic questions. See Appendix G for a copy of the survey instrument.

Baumrind Measures

Respondents' perceptions of their parents' parenting styles were assessed using an abbreviated version of Buri's (1991) Parental Authority Questionnaire (PAQ). As discussed in the literature review, the PAQ was originally created as a means of assessing authoritarian, authoritative, and permissive parenting behavior. The pre-test, also discussed above, extended the PAQ to include items for measuring neglecting/rejecting parenting. The proposed study used an abbreviated version of the extended PAQ in order to measure participants' perceptions of their parents' parenting styles. A shortened version of the PAQ was implemented because a survey instrument with the full version would exceed 100 items. As discussed above, a limited number of pre-test participants who accessed the survey actually completed each survey item; it can was assumed that the length of the original measure contributed to the low completion rate.

Split-half reliability analysis of the pre-test responses was implemented in order to create the shortened scale. George and Mallery (2010) suggest that applying the split-half technique is acceptable when a questionnaire contains a large number of items intended to measure similar concepts. For example, the original PAQ is devised of six scales with ten items each; the extended version offers two additional ten item scales – a total of 80 items. The researcher simply created each scale through a trial-and-error process that determined which five items had the highest alpha score when grouped together. By utilizing split-half reliability analysis of the pre-test results, the researcher was able to create eight scales with five items each. Simply, the researcher was able to cut the survey instrument in half while retaining similar Cronbach's alpha scores (see Table 7).

Table 7: *Comparison of Coefficient Alpha Values: Full Scale vs. Split-Half*

	Coefficient Alpha Values	
	Full Scale	Split-Half
Maternal Authoritarian	.85	.77
Paternal Authoritarian	.88	.83
Maternal Authoritative	.88	.87
Paternal Authoritative	.91	.90
Maternal Neglecting/Rejecting	.86	.82
Paternal Neglecting/Rejecting	.90	.90
Maternal Permissive	.80	.74
Paternal Permissive	.79	.79

The survey items measure Baumrind's four parenting types; as stated, all eight scales contain five items. The maternal authoritarianism scale ($\alpha = .77$) scale asks participants to indicate their level of agreement with a series of statements such as, "Whenever my mother told me to do something, she expected me to do it immediately without asking any questions," and, "Even if I didn't agree with her, my mother felt that it was for my own good if I was forced to conform to what she thought was right." The paternal authoritarianism scale ($\alpha = .83$) contains similar items, including, "My father has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to do."

Maternal authoritativeness ($\alpha = .87$) asks respondents their level of agreement to a series of statements, including, "As I was growing up, my mother consistently gave me direction and guidance in rational and objective ways," as well as, "My mother gave me direction for my behavior and activities as I was growing up and she expected me to follow her direction, but she was always willing to listen to my concerns." The paternal authoritativeness scale ($\alpha = .90$) contains those two measures and three others, including, "My father had clear standards of

behavior for me as I was growing up, but he was willing to adjust those standards to my needs." The newly created maternal neglect/rejection scale (α = .82) contains statements such as, "As I was growing up, I had no idea what my mother expected of me," and, "My mother never gave me any guidance as I was growing up." Paternal neglect/rejection (α = .90) asks participants their level of agreement to two of the maternal items described above as well as three other items, including, "As I was growing up, my father did not direct my behaviors, activities, and desires."

The maternal permissiveness scale (α = .74) asks respondents to indicate their level of agreement with declarations such as, "Most of the time as I was growing up my mother did what I wanted her to do when making decisions," and, "As I was growing up, my mother allowed me to decide most things for myself without a lot of direction from her." The same five items are on the paternal permissiveness scale (α = .79). To reiterate, the researcher believed that an abbreviated version of the full PAQ scale captured results similar to those that would have been captured if the longer 80-item version were distributed to participants.

Other Parenting Measures

Because the research discussed in the literature review suggested that "caretaker" is not synonymous with "biological parent," the survey instrument directed the participants to click or mark (depending on electronic of paper survey) the response "indicating which female raised you the most while you were growing up and respond to the following statements with that person in mind;" similar directions are given before the respondent begins the paternal portion of the questionnaire. The answer categories include: Biological Mother, Foster Mother, Adopted Mother, Step Mother, Grandmother, Sister, Aunt, Female Cousin, Other Female Relative (with a prompt to indicate who), and None (with a prompt to skip to the next section on the paper

survey; electronic survey-takers will be re-directed automatically). Again, the response categories for paternal caretaker are similar, yet reflect gender differences.

The proposed research also sought an answer to the questions of whether respondents believe their parents' parenting styles affected their behavior and whether they hold their parents accountable for the behaviors they engaged in. Participants were asked to indicate their level of agreement to the following survey items, "My mother's parenting style had a big effect on my behavior while growing up," and, "It is my mother's fault that I have done the things that I have done." Items measuring paternal impact were reworded accordingly.

Level of Criminal Involvement – Dependent Variable

The survey instrument also measured self-reports of the participants' involvement in deviant, delinquent, and criminal behavior. This section asked a variety of questions hoping to elicit the individual respondent's engagement in a variety of deviant and illegal activities. Respondents also were asked to estimate the number of times they had taken part in the act. Most survey items were taken from early research conducted by Elliott and Ageton (1980) and Thornberry and Farnworth (1982). The self-report tables asked the participants to indicate the acts that they committed by making an "x" in the box next to the crime/behavior.

Elliott and Ageton (1980) arranged many of the survey items into six subscales: predatory crimes against persons, predatory crimes against property, illegal service crimes, public disorder crimes, deviant behaviors, and hard drug use. The latter designation, hard drug use, was changed to alcohol/drug use in the current study because it asks participants to report on alcohol use (both underage and of-age use) in addition to the use of nine other substances, including cocaine, heroin, marijuana, and tobacco. Given the inclusion of tobacco, marijuana, and alcohol, the use of the term "hard" no longer applied. Items included in the "alcohol/drug

use" scale did not ask the respondents to estimate the number of times that they had partaken in a certain substance because it would be nearly impossible for a long-time user to provide an accurate estimation of frequency of use.

There are a total of eight items measuring crimes against people. Statements indicating involvement in predatory crimes against persons include, "purposely killed someone," "used a weapon to threaten another person," and, "had (or tried to have) sexual relations with someone against their will." Nine items were included in the predatory crimes against property scale, they include: "purposely damaged or destroyed property belonging to another person," "stolen money from another person," and, "stolen (or tried to steal) something worth more than $50." A total of six items were included in the illegal service crime scale. These items include, "sold marijuana" and "paid to have sexual relations with another person." There were eight items included in the public disorder crimes scale, including: "set off a fire alarm for fun," "been drunk in a public place," and "carried a gun without a permit." Lastly, there were six statements in the deviant behavior scale including, "cheated on school tests" and "run away from home when younger than 18."

Admittedly, these 48 items do not represent an exhaustive measure of involvement in all types of criminal, delinquent, and deviant activities. However, they are a substantial upgrade from the limited measures used to examine deviance, delinquency, and criminal behavior in many of the parenting style studies that were discussed earlier in the literature review. Furthermore, Palmer and Hollin (2001, p. 89) used a 46-item Elliott and Ageton (1980) scale and concluded that it displayed "high reliability (test – retest $r = 0.70$-0.95)." Additionally, Huizinga and Elliott (1986) noted that the 46-item scale had superior sampling validity than most other self-report measures; sampling validity is used to determine "whether the items included in a

scale form an adequate and representative sample of the domain of behavior being investigated" (p. 311). While not exhaustive of all deviant, delinquent, and criminal behaviors, prior research has suggested that the survey items that were used to measure level of criminal involvement are reliable (Palmer & Hollin, 2001) and valid (Huizinga & Elliott, 1986).

Demographics

The questionnaire concluded with questions about the respondents' demographics. Specifically, the researcher was interested in the age, sex, and race of the respondents. Oftentimes, as discussed above, sex is an unused variable when studying parenting typologies. Additionally, it would have been interesting to examine how the differences in parenting styles of white and non-white families contributes to deviant, delinquent, and criminal outcomes had there been enough racial variation in the sample.

Reliability and Validity

Reliability

Simply, reliability is the consistency of a measure (Shadish, Cook, & Campbell, 2002). A measure is reliable if results are consistent with each other over the course of multiple repeated tests (Carmines & Zeller, 1979). As mentioned, the reliability scores for the survey items measuring perceived parenting styles have been found to be "respectable" and "very good" (DeVellis, 2003) in all of Buri's tests and in the pre-test that was conducted in preparation for this current research.

Validity

Carmines and Zeller (1979, p. 12) define validity as the "crucial relationship between concept and indicator." In this instance, the main concept is Baumrind's typology of parenting styles and the indicator is the survey instrument used to assess perceptions of this typology.

Thankfully, Buri (1991, p. 118) tested the PAQ and determined that it is a "valid measure of Baumrind's parental authority prototypes." Measurement of the neglecting/rejecting scale in the pre-test suggested that it also is a valid measure of Baumrind's typology.

Buri's (1991) original survey instrument showed significant discriminant validity between the authoritarian, authoritative, and permissive measures at the .0005 level. The extended survey instrument displayed discriminant between all four measures of Baumrind's parenting types at the .01 level. Shadish et al. (2002, p. 507) explain discriminant validity as the idea that a "measure of A can be discriminated from a measure of B, when B is thought to be different from A." This is important in the current study for two reasons: (a) each parenting style is different from the other three and (b) in order to limit bias, the researcher must be sure that he is measuring each parenting style correctly. It appears that these criteria have been met.

Similarly, Buri (1991) examined the criterion validity of his instrument by comparing measurement outcomes with outcomes from the Parental Nurturance Scale (PNS; Buri, Misukanis, & Mueller, 1988). Comparisons were made because parental nurturance is an implicit component of Baumrind's parenting typology. Buri (1991) believed that the authoritative measures on the PAQ scale would have a positive significant relationship with the PNS, the authoritarian measures on the PAQ scale would have a negative significant relationship with the PNS, and that the permissive measures would not be significant. Measures for both authoritative and authoritarian parenting were significant at the .0005 level, while the measure for permissive parenting was not significant at the .10 level. This suggests that, as constructed, the survey instrument has a high level of criterion validity.

Threats to validity. As is the case with most social science research, there are a variety of validity threats inherent within the current study. The majority of validity threats revolve

around one of the two sample groups. Buri (1991) originally tested his survey instrument with the help of 69-185 college students enrolled in introductory psychology courses and the pre-test examined a similar instrument with the help of approximately 300 university students, thus the researcher was less concerned with any validity threats that may have resulted from the use of college students than with validity threats that may have resulted from using jail inmates as participants, as will be explained below.

One possible risk was including a survey item (or multiple items) that was not understood (Fowler, 2009). The researcher assuaged this potential problem by constantly reminding the inmate participants that they may ask questions if they needed something clarified; a handful of inmate participants asked questions while completing the questionnaire. Additionally, federal human subject protections, which are discussed momentarily, mandate that survey questions be worded in a way that is easily understandable by protected populations. Because the researcher constantly asked if the respondents needed anything clarified and the majority of respondents did not request clarification, the researcher anticipates limited validity threats due to failure to understand what a question was asking.

Memory recall represents another threat to validity (Fowler, 2009). It was anticipated that that some respondents may not recall specific interactions with their parents, especially if those interactions occurred one or more decades ago. The researcher felt some assurances knowing that Buri (1991) had little trouble with his sample of university students, but also felt that this could have been more problematic for the inmate sample. In instances when respondents were unable to recall exactly when something happened, the researcher asked them to provide their best estimate. Obviously, this only limited the potential for error, but failed to eliminate it entirely.

Human Subject Protections

One sample of respondents in the current study consisted of men and women who were awaiting trial, or had been found guilty of or pled guilty to criminal activity in one northeastern state and are currently detained in one of two county jails, as described above. Thus, the respondents were categorized as "prisoners" by the United States Department of Health and Human Services (HHS). "Prisoners" are deemed a vulnerable population and are afforded additional protections relative to their participation in research.

These additional protections are included in the HHS regulations at 45 CFR 46.302 (c), "Inasmuch as prisoners may be under constraints because of their incarceration which could affect their ability to make a truly voluntary and uncoerced decision whether or not to participate as subjects in research, it is the purpose of this subpart to provide additional safeguards." Taking these safeguards into consideration, the current study offered no advantages to prisoners who decide to participate in the project. This included the provision that any inmates who decided to participate were not given special parole considerations, as outlined in 45 CFR 46.305 (a). Further compliance warranted that the survey instrument was worded in language that was understandable to the respondents and that the participants were not exposed to any risks that would not be accepted by non-inmates.

Going beyond the specific protections guaranteed to this sample of respondents, this study ensured that each participant was aware of the voluntary nature of this research. Prior to survey administration, the researcher reminded each respondent that participation was completely voluntary. Additionally, participants were made aware that they were free to discontinue participation at any time while completing the survey questionnaire. The researcher read an informed consent form (Appendix E, as mentioned above) aloud to the sample of jail

inmates; their consent was assumed once they began completing the form. All participants in the sample of jail inmates were allowed to keep a copy of the informed consent form.

As discussed above, the study also had a sample of university students. While human subject protections are a bit different for non-incarcerated individuals, a few important issues may have arisen. First, the researcher administered surveys to university students during the Fall 2010 semester, thus it was assumed that some students still may have been younger than 18-years-old. Students younger than 18-years-old were asked to withdraw from participation. Second, students also were reminded that their participation was voluntary and that they would not be subjected to negative sanctions by the researcher, their professors, or the University for exercising their right to not participate. Again, they also were told that they were free to discontinue participation at any time while completing the survey.

The researcher maintained the complete anonymity of both sample groups of respondents by asking that they refrain from placing anything that could identify them on the survey; the identities of university students who entered the raffle will remain confidential. All completed paper survey questionnaires will be kept in a secured location accessible solely to the researcher and dissertation chair, while the electronic questionnaires will be accessible only through the researcher's Qualtrics account.

Limitations

As is the case with most of the prior research studying Baumrind's typology, the current study has a number of limitations. First, this study employed a cross-sectional research design. Instead of following adolescents and their parents longitudinally and observing parent-child interactions, this study sought responses from participants at one point in time. This contributes to the second limitation of the study – respondent recall. Recall may have been problematic in

instances when the respondent and his/her parent have been separated for long periods of time or when the parent-child relationship was shortened or weakened.

These two limitations contribute to the third limitation – all survey responses were self-reported. As Steinberg et al. (1994, p. 768) suggest, "findings can be interpreted only to show that adolescents' adjustment is related to the way in which they *subjectively* experience their parents" [emphasis in original]. This problem is minor given the fact that the current research sought to measure the relationship between respondents' perceptions of parenting styles and level of criminality. Had the proposed research sought more than respondents' perceptions the self-report nature of the study may have been more problematic. Additionally, as Lamborn et al. (1991, p. 1062-1063) argue, "self-report measures enable investigators to include substantially larger and more heterogeneous samples…larger samples may permit the detection of theoretically important findings that may go unnoticed in smaller-scale research." Thus, despite the subjectivity associated with self-report measures, the use of them in this study may allow the researcher to make important discoveries regarding the typology under investigation.

Finally, reverse causality cannot be ruled out completely. Simply, because of the cross-sectional design the possibility exists that parenting style may not be the catalyst for criminal involvement, but rather deviance, delinquency, and anti-social behavior during adolescence may cause parents to implement different types of parenting strategies. Similar to the findings of Lamborn et al. (1991), the researcher conducting the study is confident that the findings suggest that the notion of reserve causality is a minor limitation; despite this, the researcher will be cognizant about reverse causality when interpreting findings.

Strengths

As discussed in the literature review, Hoeve et al. (2009) conducted a meta-analysis that examined 161 manuscripts in an effort determine the existence and magnitude of the relationship between parenting and delinquent behavior. Of these 161 studies, the authors noted that "very few" examined parenting styles; a closer examination revealed that only four studies looked at parenting style and that one of the four studied each of the four styles. Based on the glaring lack of empirical data exploring the link between parenting style and criminal involvement, it is argued that one strength of the current research is the contribution that it will make to the literature.

Another strength of the study is the use of dual sampling groups. Prior literature, as discussed earlier, focused almost exclusively on Caucasian, male, adolescents from middle-to-upper class families. Once again, this study surveyed a heterogeneous mix of young men and women with different ethnic and racial backgrounds from different socio-economic brackets. Doing so not only allowed the researcher to explore the differences between Caucasian and minority outcomes based on historically different parenting styles, but it also allowed for a comparison between those adjudicated as both delinquent and criminal at some point in their lives, as well as those who have remained non-criminal/non-delinquent throughout the life-course. This type of analysis represents another contribution to the literature.

Finally, the current research is cross-disciplinary. Baumrind's typology originated in the psychological literature over four decades ago, but has not seen much interest in criminology. To grow criminology as a discipline it is important that criminologists fully utilize empirical findings from brethren in other social science disciplines. The integration of a psychological

typology with a criminological outlook, something that it has seen seldom of, should add to the growth of both.

Analysis Plan

The researcher used a variety of statistical techniques in order to analyze the data. First, descriptive statistics were computed in order to allow the researcher to gain a general understanding of the participants, as well as to allow the researcher to compare both sample groups to each other. Next, the researcher analyzed the internal consistency values for the parenting scales. Doing so allowed the researcher to verify the reliability of the abbreviated PAQ measurement instrument that was used in the study. Because the scales that comprised the abbreviated PAQ attained Cronbach's alpha values similar to Buri's (1991) original values and the scores obtained in the pre-test it suggested that the shortened version of the PAQ is just as reliable as the full-length measures and, therefore, will allow for shorter survey instruments and quicker survey administration in future trials. Third, the researcher verified the validity of the abbreviated PAQ measure by completing an intercorrelation analysis of the parenting scales. This ensured that the shortened survey instrument measured what it was intended to measure, much like the original PAQ and the extended version discussed above.

The researcher also employed multiple regression analysis. Multiple regression uses a linear combination of multiple independent variables in order to assess their impact on a dependent variable (Mertler & Vannatta, 2005). In the current research, sex, race, and the four perceived parenting styles were used to predict level of criminal involvement. The multiple regression equation used in the current study looked like this:

$\hat{Y} = B_0 + B_1X_1 + B_2X_2 + \ldots + B_kX_k + \hat{e}_i$

Where:

$\hat{Y}$ = the predicted value of the dependent variable, level of criminal involvement

B_0 = the y-intercept when $X = 0$; or, the constant

B = the slope of the regression line

X_1 = sex

X_2 = race

X_3 = maternal authoritarian parenting style

X_4 = maternal authoritative parenting style

X_5 = maternal neglecting/rejecting parenting style

X_6 = maternal permissive parenting style

X_7 = paternal authoritarian parenting style

X_8 = paternal authoritative parenting style

X_9 = paternal neglecting/rejecting parenting style

X_{10} = paternal permissive parenting style

$\hat{e}_i$ = the predicted error term

Mertler and Vannatta (2005) suggest that researchers address the issue of multicollinearity prior to performing multiple regression. While the easiest method of determining multicollinearity is to examine a correlation matrix, Mertler and Vannatta suggest that researchers obtain tolerance statistics or examine the variance inflation factor (VIF) for each independent variable. Prior to conducting the multiple regression analysis in the study, the researcher observed the tolerance statistics and the VIF scores for the independent variables. Meyers, Gamst, and Guarino (2006, p. 182) suggest, "[T]olerance is the amount of a predictor's

variance not accounted for by the other predictors ($1 - R^2$ between predictors)." The lower the tolerance score, the more likely multicollinearity exists between the independent variables (Mertler & Vannatta, 2005; Meyers et al., 2006). Typically, tolerance scores lower than .1 are "problematic" and those around .4 may be concerning (Mertler & Vannatta, 2005; Meyers et al., 2006). VIF scores are obtained by dividing 1 by the tolerance score (Meyers et al., 2006). VIF scores around 2.5 are similar to tolerance scores of .4 and VIFs of 10 are essentially the same as tolerance scores of .1 (Meyers et al., 2006). Finally, the researcher employed a multiple regression analysis in order to determine the effect that parenting styles, sex, and race had on delinquent and criminal involvement.

CHAPTER IV

ANALYSIS AND RESULTS

The intent of this chapter is to discuss the analyses conducted in this study and present the findings of those analyses. Frequencies and descriptive statistics for some of the variables will be presented and discussed first. A discussion about the reliability of the extended parenting scale measure will be presented second. Third, bivariate correlations between independent and dependent variables will be examined. A review of the results of the multiple regression analysis will conclude this chapter.

The analysis presented in this chapter is based on a sample of 409 respondents from a northeastern state. Of the 409 respondents in the sample, 298 were undergraduate college students at one mid-sized state university during data collection and the remaining 111 were incarcerated in one of two county jails. The student sample was generated as follows: using Qualtrics, a web-based survey tool, the researcher sent the survey questionnaire to a random sample of 2,000 undergraduate students via their university-issued email address. Of those who received the email solicitation to complete the survey, 412 (20.6%) viewed at least one question. However, several students exited the survey prior to reporting on key parenting and behavioral variables (n = 114). Thus, their incomplete responses were removed from the analyses which left a remaining sample of 298 students; this represents a response rate of 14.9%. The individuals who comprised the remainder of the sample were incarcerated in one of two county jails in the same northeastern state during data collection. Fifty-seven (51.4%) respondents in the inmate sample were housed in a rural county jail and 54 (48.6%) participants were housed in an urban county jail. In total, the researcher administered 141 paper questionnaires to the inmates; 111

inmates chose to participate in the study for an inmate response rate of 78.7%. Again, data are presented from the combined sample of 409 students and inmates.

Frequencies and Descriptive Statistics

Demographic Variables

Table 8 presents the age of the respondents in the sample. As seen, many of the respondents in the entire sample were under the age of 21 (46.7%), and the majority were 30 and younger (79.7%). Approximately 6% (n = 25) of the respondents did not provide their age. When looking at the university students, one notices that the majority of the student sample was 20-years-old or younger (63.1%). Additionally, 92% of the university students who responded were 30 and younger. Almost 5% (n = 14) of the student sample did not report their age. The age of respondents in the county jail inmate sample was more evenly distributed. Approximately 47% (n = 52) of the inmates reported being 30 or younger, while a little more than 43% (n = 48) reported being over the age of 30; approximately 10% (n = 11) of the jail inmates did not report their age.

Table 8: *Frequencies and Percentages – Age of Sample*

Age	Valid *n*	Valid %
18-20	191	46.7
21-30	135	33.0
31-40	33	8.1
41-50	16	3.9
51+	9	2.2
Unknown	25	6.1
Total Sample	409	100
18-20	188	63.1
21-30	86	28.9
31-40	7	2.3
41-50	3	1.0
Unknown	14	4.7
All Students	298	100

18-20	3	2.7
21-30	49	44.1
31-40	26	23.4
41-50	13	11.7
51+	9	8.1
Unknown	11	9.9
All Inmates	111	99.9

Table 9 contains frequencies and percentages of the demographic variables examined in this study. Raw numbers and valid percentages are included for sex and race. The overall sample consisted of 244 females (61.9%) and 150 males (38.1%); fifteen student respondents did not provide information about their sex, thus there is no demographic information reported in Table 9 for these individuals. Instead, demographic sex information is presented for the remaining 394 respondents. As seen in Table 9, the university sample consisted of 208 females (73.5%) and 75 males (26.5%). According to the University *Fact Sheet* (Fall 2010), the undergraduate university population is approximately 57% female and 43% male, thus female students are overrepresented in the sample. Perhaps this is due to young women being more cooperative or interested in the subject matter; many female respondents contacted the researcher directly to ask about the project and their desire to discuss the topic of parenting, while no male participants were in contact.

Table 9: *Frequencies and Percentages – Sex of Sample*

Variable	Valid *n*	Valid %
Male	150	38.1
Female	244	61.9
Total Sample	394	100
Male	75	26.5
Female	208	73.5
All Students	283	100
Male	75	67.6
Female	36	32.4

All Inmates	111	100
Male	42	73.7
Female	15	26.3
CJ1 Inmates	57	100
Male	33	61.1
Female	21	38.9
CJ2 Inmates	54	100

The inmate sample consisted of 36 females (32.4%) and 75 males (67.6%). Again, this represents an overrepresentation of female inmates when compared to national averages, which are approximately 12.3% (Minton, 2011); additionally, the number of female respondents from the rural county jail (n = 15; 26.3%) represents an increase over the typical daily average of 13% female inmates (L. Simmons, personal communication, December 1, 2010). It is believed that the percentage of female inmate respondents is high because of survey response rates in the jails. Simply, female inmates were more willing to respond and engage with the researcher in conversation about parenting. Additionally, female respondents in the rural county jail were allowed to leave their housing unit and enter a multi-purpose classroom in order to complete the survey, whereas male inmates completed the survey in a room attached to their housing units. A number of women also indicated that had they stayed in the housing unit they would be on lockdown in their cells, so filling out the questionnaire gave them a brief respite from punishment.

Respondents were asked to self-report their race. As presented in Table 10, the overall sample was 82.1% white (n = 321), 9.2% black (n = 36), and 8.6% of the sample (n = 34) self-reported as Asian/Pacific Islander (n = 7), Hispanic (n = 6), Native American (n = 4), or "other" (n = 17). The majority of those self-reporting as "other" indicated that they were "bi-racial" and had one parent who was black and another who was white (n = 12); fourteen student respondents

and four inmate respondents did not provide information about their race, thus there is no demographic information reported in Table 10 for these 18 individuals. Instead, demographic race information is presented for the remaining 391 respondents.

Table 10: *Frequencies and Percentages – Race of Sample*

Variable	Valid *n*	Valid %
African American/Black	36	9.2
Asian/Pacific Islander	7	1.8
Caucasian/White	321	82.1
Hispanic	6	1.5
Native American	4	1.0
Other	17	4.3
Total Sample	391	100
African American/Black	14	4.9
Asian/Pacific Islander	7	2.5
Caucasian/White	252	88.7
Hispanic	4	1.4
Native American	1	0.4
Other	6	2.1
All Students	284	100
African American/Black	22	20.6
Caucasian/White	69	64.5
Hispanic	2	1.9
Native American	3	2.7
Other	11	10.3
All Inmates	107	100
African American/Black	4	7.0
Caucasian/White	45	78.9
Hispanic	2	3.5
Native American	2	3.5
Other	4	7.0
CJ1 Inmates	57	100
African American/Black	18	36.0
Caucasian/White	24	48.0
Native American	1	2.0
Other	7	14.0
CJ2 Inmates	50	100

The participants in the university sample were predominantly white (*n* = 252; 88.7%), 4.9% black (*n* = 14), and 6.4% were Asian/Pacific Islander, Hispanic, Native American, or "other" (*n* = 18). According to the University *Fact Sheet* (Fall 2010), the undergraduate population at the time the survey was administered was 87% white and 13% minority, thus the undergraduate sample is representative of the university population in relation to race. Additionally, the racial diversity within the inmate sample varied between the rural county jail and the urban county jail with white respondents comprising 78.9% (*n* = 45) of the rural sample and 48% (*n* = 24) of the urban sample, while black respondents made up only 7% (*n* = 4) of the rural sample and 36% (*n* = 18) of the urban sample. Based on the fact that over 80% of the total sample is white and no other race accounts for much more than 9% of the total, the race variable will be dichotomized into "non-white" and "white" categories for the analyses.

Caretaker Variables

The main purpose of the current study is to examine the effects that perceived parenting styles have on behavioral outcomes, such as deviance, delinquency, and criminality. Before explaining these effects, one first must examine who respondents identified as their primary caretakers while growing up. To do so, participants were asked to indicate the woman and the man who "raised [them] the most while [they were] growing up." Response categories for the female caretakers included: biological, adopted, foster, or step mother, as well as grandmother, sister, aunt, female cousin, other, and none for those who were not raised by a woman. Male caretaker response categories included: biological, adopted, foster, or step father, in addition to grandfather, brother, uncle, male cousin, other, and none. The following sections provide descriptive statistics regarding who the study sample reported living with while they were growing up.

Maternal caretaker. As stated, the researcher was interested in who the participants identified as their main maternal and paternal caretaker, thus respondents were asked to identify which male and female "raised [them] the most" while they were growing up; maternal results are presented in Table 11. With regards to the maternal caretaker, 88.5% (n = 362) of all respondents indicated that their biological mother raised them, 3.4% (n = 14) noted that their grandmother raised them, and 1.5% (n = 6) of respondents indicated that they had no female caretaker while growing up. The remaining 6.6% was scattered amongst adoptive, foster, and step mothers, as well as sisters and aunts.

Table 11: *Frequencies and Percentages for Maternal Caretakers*

Variable	Valid *n*	Valid %
Biological Mother	362	88.5
Adopted Mother	7	1.7
Grandmother	14	3.4
Aunt	7	1.7
No Maternal Caretaker	6	1.5
Other	13	3.2
Total Sample	409	100
Biological Mother	278	93.3
Adopted Mother	4	1.3
Grandmother	7	2.3
Aunt	3	1.0
No Maternal Caretaker	1	.3
Other	5	1.7
All Students	298	100
Biological Mother	84	75.7
Adopted Mother	3	2.7
Grandmother	7	6.3
Aunt	4	3.6
No Maternal Caretaker	5	4.5
Other	8	7.2
All Inmates	111	100

Table 12 shows that the university student sample and the county inmate sample differed significantly when reporting maternal caretaker, $t(407) = -5.96$, $p \leq .001$ [university students (M = 1.24, SD = 1.04) and inmates (M = 2.35, SD = 2.73)]. Biological mother (and biological father)

were each coded as "1" and each of the other options was coded between "2" and "10," thus a mean caretaker score that is closer to "1" indicates that the sample group under investigation has responded to the survey with a biological parent in mind.

Table 12: *Independent Samples T-Test: Caretaker Variables – Between Sample, Race, and Sex*

	Sample	Race	Sex
Maternal Caretaker	-5.96**	5.65**	-2.45*
Paternal Caretaker	-3.14*	4.45**	-.54
Resided With	-1.39	1.38	-1.11

**$p \leq .01$, *$p \leq .05$

Most university students reported that their main maternal caretaker while growing up was their biological mother (93.3%; $n = 278$), whereas just over three-fourths of the inmate sample named their biological mother as their main maternal caretaker (75.7%; $n = 84$). A higher percentage of county jail inmates claimed to have been raised by their grandmother (6.3%; $n = 7$), an aunt (3.6%; $n = 4$), or an adopted mother (2.7%; $n = 3$) than the university students who reported the following: grandmother (2.3%; $n = 7$); aunt (1.0%; $n = 3$); and adopted mother (1.3%; $n = 4$). Only one university student (0.3%) claimed to have no maternal caretaker, while 4.5% ($n = 5$) of the inmate sample claimed no maternal caretaker. The individual that respondents identified as their maternal caretaker also differed significantly based on race (non-whites vs. whites), $t(389) = 5.65$, $p \leq .001$ [non-whites ($M = 2.59$, $SD = 2.83$) and whites ($M = 1.32$, $SD = 1.33$)] , and based on sex, $t(392) = -2.45$, $p = .015$ [females ($M = 1.38$, $SD = 1.45$) and males ($M = 1.82$, $SD = 2.14$)]. Simply, these results indicate that white respondents were significantly more likely to have been raised by their biological mother than their non-white counterparts. Additionally, female respondents were significantly more likely to have been raised by their biological mother compared to male respondents.

Paternal caretaker. Results for the identified paternal caretakers are presented in Table 13. Approximately three-fourths of the entire sample (73.3%; $n = 297$) reported that they were raised by their biological father. Twenty-six respondents (6.4%) reported being raised by their stepfather, 3% ($n = 12$) named an adoptive father as their main paternal caretaker, and more than 10% of the sample ($n = 43$) reported that they had no male caretaker while growing up. The remaining 6.7% of responses was scattered amongst foster fathers, grandfathers, brothers, and uncles; missing data from four respondents is not included in this analysis.

Table 13: *Frequencies and Percentages for Paternal Caretakers*

Variable	Valid *n*	Valid %
Biological Father	297	73.3
Adopted Father	12	3.0
Stepfather	26	6.4
Grandfather	7	1.7
Uncle	7	1.7
No Paternal Caretaker	43	10.6
Other	13	3.2
Total Sample	405	100
Biological Father	234	79.1
Adopted Father	8	2.7
Stepfather	11	3.7
Grandfather	5	1.7
Uncle	4	1.4
No Paternal Caretaker	29	9.8
Other	5	1.6
All Students	296	100
Biological Father	63	57.8
Adopted Father	4	3.7
Stepfather	15	13.8
Grandfather	2	1.8
Uncle	3	2.8
No Paternal Caretaker	14	12.8
Other	8	7.4
All Inmates	109	100

Similar to differences between the university sample and the inmate sample regarding maternal caretakers, there also were significant differences between the samples in relation to paternal caretakers, $t(403) = -3.14$, $p = .002$ [university students ($M = 2.25$, $SD = 2.83$) and

inmates (M = 3.29, SD = 3.30)] . Nearly 80% (n = 234) of the undergraduate students reported living with their biological father while growing up. Comparably, less than 58% (n = 63) of the inmate sample reported living with their biological father. Many inmates reported living with a stepfather (13.8%; n = 15), while only 3.7% (n = 11) of students considered a stepfather as their main paternal caretaker. Additionally, 12.8% (n = 14) of the inmate sample reported having no male caretaker while growing up. Likewise, 9.8% (n = 29) of the university sample grew up without a male present in the home. The individual that respondents identified as their paternal caretaker also differed significantly based on race (non-whites vs. whites), $t(387) = 4.45$, $p \leq .001$ [non-whites (M = 3.86, SD = 3.50) and whites (M = 2.18, SD = 2.70)]. Simply, these results suggest that the university students and county jail inmates reported significantly different paternal caretakers; university students were much more likely to report growing up with a biological father, as discussed above, compared to county jail inmates – this is reflected in the t-test results. There were no significant statistical differences between males and females in the reporting of paternal caretakers.

In addition to asking respondents to identify their main maternal and paternal caretakers, the researcher also asked respondents to identify with whom they lived with the most while growing up. Participants were presented with six combinations including: "Two parents; both lived there and were involved," "My mother, but my father was also involved," "My father, but my mother was also involved," "My mother" only, "My father" only, and "Neither…were involved." Additionally, the respondents were given the option to self-report any other combination that the researcher overlooked; many of the respondents who indicated "other" noted that both caretakers lived together, but that one or both was not involved in the parenting,

while additional "other" responses suggested that caretakers were involved in a committed relationship, but one was usually overseas serving in the military.

Table 14 shows that 66.1% (n = 267) of the total sample lived with both caretakers while growing up. Table 14 also suggests that maternal caretakers had a greater role than paternal caretakers in raising the respondents. For example, 11.4% (n = 46) reported that they lived with their maternal guardian although the paternal guardian also was involved, and an additional 11.4% (n = 46) reported that their maternal caretaker was their sole support while growing up. Paternal caretakers took the lead role in only 2.7% of cases (n = 9). Sadly, three respondents (0.7%) reported that they lived with neither parent while growing up.

Table 14: *Frequencies and Percentages – Who Respondents Lived With*

Variable	Valid *n*	Valid %
Both Parents	267	66.1
Mother; Father Involved	46	11.4
Father; Mother Involved	6	1.5
Mother Only	46	11.4
Father Only	5	1.2
Neither Parent	3	.7
Other	31	7.7
Total Sample	404	100
Both Parents	204	69.2
Mother; Father Involved	31	10.5
Father; Mother Involved	3	1.0
Mother Only	30	10.2
Father Only	3	1.0
Neither Parent	1	.3
Other	23	7.8
All Students	295	100
Both Parents	63	57.8
Mother; Father Involved	15	13.8
Father; Mother Involved	3	2.8
Mother Only	16	14.7
Father Only	2	1.8
Neither Parent	2	1.8
Other	8	7.3

All Inmates	109	100

When comparing the university student sample to the inmate sample, results are strikingly similar; significant differences do not exist between the university sample and the inmate sample. The majority of participants in both samples report living with both caretakers (students: 69.2%, $n = 204$; inmates: 57.8%, $n = 63$). Additionally, the maternal caretaker assumed a lead role in terms of parenting in both samples (students: 20.7%, $n = 61$; inmates: 28.5%, $n = 31$). Conversely, paternal caretakers were less often the primary caretakers in both samples (students: 2%, $n = 6$; inmates: 4.6%, $n = 5$). Only one student (0.3%) reported living with neither caretaker and two inmates (1.8%) also claimed that they did not live with either caretaker while growing up. Finally, the caretaker groupings that respondents identified as growing up with did not differ significantly based on race (non-whites vs. whites) or based on sex.

Parenting Scales

As discussed in the second chapter, the current study utilized Buri's (1991) Parental Authority Questionnaire (PAQ) to assess the parenting styles of the respondents' caretakers. The original PAQ contains 60 total items – separated into 30 per parent – that are used to assess Authoritarian, Authoritative, and Permissive parenting. The researcher conducting the current study created a fourth scale – Neglecting/Rejecting – to measure the fourth style of parenting. As presented above in Chapter Three, a preliminary analysis of the new scale revealed that it is reliable and valid across tests for both maternal caretaker and paternal caretaker. The following section will present additional analyses on the reliability of the Neglecting/Rejecting scale.

Test of Internal Consistency

Cronbach alpha scores for Buri's initial test and the pre-test conducted prior to the current study are discussed at length in Chapter Two. To reiterate, Buri's scales have been classified as "respectable" and "very good" according to DeVellis' (2003) criteria for scale assessment. Additionally, according to the pre-test results, the Neglecting/Rejecting scale also is "respectable" and "very good" for assessing mothers and fathers, respectively. Current analyses suggest that shortened versions of each scale also are highly reliable measures of Baumrind's parenting typologies (Table 15). Using a split-half reliability test, as discussed in an earlier chapter, the researcher shortened each parenting scale from ten items to five items. By eliminating 40 items from the questionnaire, the researcher intended to increase the overall response rate. Alpha values for the shortened scale are highlighted in the column labeled "Current Study" in Table 15 below.

Table 15: *Internal Consistency of PAQ-Related Measures*

	Buri (1991) α	Spraitz Extension (Pre-Test) α	Current Study α
Mother's Authoritarianism	.85	.85	.74
Mother's Authoritativeness	.82	.88	.83
Mother's Permissiveness	.75	.80	.72
Mother's Neglect/Rejection	-	.86	.80
Father's Authoritarianism	.87	.88	.76
Father's Authoritativeness	.85	.91	.88
Father's Permissiveness	.74	.79	.77
Father's Neglect/Rejection	-	.90	.80

It appears that shortening the parenting measures did not harm the internal consistency of the scales. Despite these changes, the shortened version of the PAQ remains a "respectable," "very good," and highly reliable measure of Baumrind's typology of parenting styles.

Perceptions of Parenting Styles

As discussed, eight five-item scales were used to assess the perceptions that respondents had of their caretakers' parenting styles. Likert-type response categories were used for each item and included: "Strongly Agree," "Agree," "Neither Agree Nor Disagree," "Disagree," and "Strongly Disagree." Responses were coded on an additive scale with a range of 1 to 5; "Strongly Agree" responses were scored as a "1" whereas scores of "5" were applied to responses of "Strongly Disagree." Thus, the range of scores for each of the scales could be 5 – 25; however, results suggest that no single respondent reported "Strongly Agree" for all items in the Maternal Permissive, Maternal Neglecting/Rejecting, and Paternal Permissive scales. Furthermore, no single respondent reported "Strongly Disagree" for all items in the Maternal Authoritarian scale (Table 16). The reported sample size for each parenting style fluctuates based on a number of things, including the participants' willingness to self-report on all items and the number of respondents who did not have a maternal or paternal caretaker; the sample size for the paternal parenting styles is much lower because 43 respondents reported not having a male caretaker while they were growing up.

Table 16: *Descriptive Statistics for Measures of Parenting Type*

	N	Mean	SD	Minimum	Maximum
Maternal Authoritarianism	395	13.18	3.76	5	24
Maternal Authoritativeness	387	11.58	4.17	5	25
Maternal Permissiveness	392	15.96	3.71	6	25
Maternal Neglect/Rejection	389	20.01	4.26	6	25
Paternal Authoritarianism	353	13.56	4.07	5	25

Paternal Authoritativeness	348	12.98	4.61	5	25
Paternal Permissiveness	350	16.35	3.99	6	25
Paternal Neglect/Rejection	349	18.66	4.49	5	25

As indicated in Table 16 above, the mean score for Maternal Authoritativeness is 11.58 and represents the lowest mean score amongst all maternal scales. This suggests that respondents were most likely to "Strongly Agree" with scale items that described an authoritative mother. Similarly, the mean score for Paternal Authoritativeness is 12.98, which represents the smallest mean score amongst all paternal scales. Again, this suggests that respondents were most likely to "Strongly Agree" with scale items that described an authoritative father. Additionally, respondents were most likely to "Disagree" or "Strongly Disagree" with statements that suggested their caretakers were Neglecting/Rejecting.

The researcher conducted independent sample t-tests (Table 17) in order to compare the mean parenting scores based on sample (university students [coded = 0] vs. inmates [coded = 1]), race (non-white [coded = 0] vs. white [coded = 1]), and sex (female [coded = 0] vs. male [coded = 1]). First, there were statistically significant differences between sample groups for all parenting types. Simply, across all parenting types, university students reported different perceptions of their caretakers than did county jail inmates. Based solely on mean scores, university students were more likely than inmates to report having authoritative mothers and fathers as well as permissive mothers and fathers, whereas inmates were more likely to report having authoritarian and neglecting/rejecting mothers and fathers. These results are consistent

with research that suggests individuals with authoritative parents are less likely to run afoul of the law than individuals with neglecting/rejecting parents and authoritarian parents.

Table 17: *Independent Samples T-Test – Between Sample, Race, Sex*

	Sample	Race	Sex
M. Authoritarian	2.27*	-3.27**	.78
M. Authoritative	-3.15*	1.41	.20
M. Permissive	-4.05**	2.38*	-.78
M. Neglect/Reject	5.33**	-1.59	1.46
P. Authoritarian	1.86†	-.49	.37
P. Authoritative	-3.06*	1.59	.00
P. Permissive	-3.67**	-.05	-.82
P. Neglect/Reject	2.22*	-.51	.06

**$p \leq .01$, *$p \leq .05$, $^{\dagger}p \leq .10$

When respondents were compared based on race (non-white vs. white), there were only two significant differences. Non-white respondents were significantly more likely that white respondents to categorize their maternal caretakers as authoritarian, $t(376) = -3.27$, $p = .001$ [non-whites ($M = 11.78$, $SD = 3.21$) and whites ($M = 13.43$, $SD = 3.75$)]. Meanwhile, white respondents were significantly more likely than non-white respondents to characterize their maternal caretakers as permissive, $t(374) = 2.38$, $p = .018$ [whites ($M = 15.82$, $SD = 3.70$) and non-whites ($M = 17.02$, $SD = 3.60$)]. While mean differences between races were reported for the other six parenting types none approached levels of significance. Further analysis revealed no significant differences between white and non-white university students in terms of their perceptions of their caretakers' parenting styles.

Additionally, when the entire sample was compared based on the sex of the respondents there were no significant differences between reported parenting types. Further analyses showed no significant differences in reported parenting types between male and female inmates and weak statistical differences in maternal permissiveness [$t(276) = 1.72$, $p = .086$] and paternal

permissiveness [$t(249) = 1.65$, $p = .10$] between males and females from the university sample. The lack of significant findings for between-sex differences suggests that males and females may have similar perceptions of the way that they are raised.

Dependent Variable Scales

As indicated in the previous chapter, various deviant, delinquent, and criminal behavior items were taken from Elliott and Ageton (1980) and Thornberry and Farnworth (1982). In the current study, the dependent variables are organized into six scales (Table 18); the scales are organized as such: predatory crimes against persons (8 items, including "purposely killed somebody," "hit somebody," and "attacked another person with the intent to injure or kill them"), predatory crimes against property (9 items, including "purposely destroyed property," "stole something valued between $10 and $50," and "motor vehicle theft"), illegal service crimes (6 items, including "received money for sex," "paid money for sex," and "sold marijuana"), public disorder crimes (8 items, including "set off a fire alarm," "drunk in public," and "made obscene phone calls"), deviant behaviors (6 items, including "cheated in school," "lied to authority figures," and "skipped class"), and alcohol/drug use (10 items, including substances such as tobacco, alcohol, marijuana, cocaine, heroin, and methamphetamine). Additionally, the alcohol/drug use scale can be broken down into two subscales: soft alcohol/drug use (3 items) and hard drug use (7 items). Elliott and Ageton (1980) arranged the items into six scales, thus this also was done with the 48 dependent variable items in the current study. The reliability of the dependent variable scales and descriptive statistics are discussed in the next section.

Table 18: *Dependent Variable Scales and Subscales*

Predatory - Property	**Predatory - Person**	**Public Disorder**	**Alcohol/Drug Use**
Purposely destroyed property	Hurt – sought medical attention	Set off fire alarm	Tobacco < 18
Motor vehicle theft	Used a weapon	Carried gun; no permit	Alcohol < 21
Stole something >$50	Killed somebody	Thrown objects	Marijuana

Stole something <$10	Hurt – minor way	Carried hidden weapon	Hallucinogens
Stole something between $10 - $50	Attacked to injure or kill	Disorderly in public	Amphetamines
Stole money	Hit somebody	Drunk in public	Barbiturates
Held stolen goods	Sexual assault	Obscene phone calls	Heroin
Kept extra change	Strong-armed somebody	Verbal altercations	Cocaine
Trespassing			Methamphetamines
		Hard Drug Use (sub)	Prescription Pain Pills
Illegal Services	**Deviant Behaviors**	Hallucinogens	
Gave money for sex	Ran away < 18	Amphetamines	**Alc./Soft Drugs (sub)**
Get money for sex	Lied about age	Barbiturates	Tobacco < 18
Sold marijuana	Cheated in school	Heroin	Alcohol < 21
Buy alcohol for minor	Lied to authority	Cocaine	Marijuana
Avoid payment	Skipped class	Methamphetamines	
Sold other drugs	Suspended from school	Prescription Pain Pills	

Originally, the alcohol/drug use scale contained 11 items. The additional item asked respondents to report on their use of alcohol while of legal drinking age; this item was also included as a fourth item in the alcohol/soft drug use subscale. For a number of reasons, this item was removed from the analysis. First, approximately 47% (n = 191) of the total sample, and 63% of the student sample, reported being younger than the current legal drinking age, thus they were not able to answer this question. Second, when examining all of the behaviors in the alcohol/drug use scale (and additional subscales) it is noted that all remaining items are unlawful behaviors; consuming alcohol while of legal drinking age is a lawful behavior, thus its inclusion in the scale did not make sense conceptually. Based on these two reasons, this item has been removed from all further analyses in this study.

Internal Consistency of Dependent Variable Scales

Cronbach's alpha scores for each of the six dependent variable scales and the two subscales were generated (Table 19). The 8-item predatory crimes against persons scale has an alpha score of .753, which is considered respectable (DeVellis, 2003). The 6-item illegal services scale (α = .750) and the 8-item public disorder scale (α = .762) also are respectable. Cronbach's alpha scores for the 9-item predatory crimes against property scale (α = .867) and the 10-item

alcohol/drug use scale (α = .897) are considered very good. The 6-item deviant behavior scale (α = .656) reports an alpha score that DeVellis considers "minimally acceptable." Altogether, the six scales comprised of 48 items represent an acceptable and reliable measure of a variety of behaviors. Additionally, the two subscales reported differing levels of acceptability. The 3-item alcohol/soft drug use scale had a respectable alpha score (α = .748), while the 7-item hard drug use scale had a very good alpha score (α = .912).

Table 19: *Internal Consistency of Dependent Variable Scales*

	Current Study α
Predatory Crimes – Person	.753
Predatory Crimes – Property	.867
Illegal Services Crimes	.750
Public Disorder Offenses	.762
Deviant Behaviors	.656
Alcohol/Drug Use – All	.897
Alcohol/Soft Drug Use	.748
Hard Drug Use	.912

Frequencies of Dependent Variables

Total sample. Respondents were asked to self-report if they had ever engaged in each of the 48 deviant, delinquent, or criminal activities listed. Responses were coded "0" for if they had not and "1" if they had engaged in the behavior. Table 20 displays the frequency with which respondents reported taking part in each category of deviance and criminality. It should be noted that there were respondents who did not respond to every question within a dependent variable scale; non-response was random and not systemic in nature, thus participants were not removed from the analysis. In most instances, respondents were likely to engage in only a few acts within each category with the exception of the "General Deviance" scale in which 35.8% of respondents reported taking part in 4 – 6 of the activities. With regards to the other five scales, over 50% of respondents reported engaging in as few as two or less of the deviant and criminal behaviors.

Table 20: *Frequencies and Percentages for DV Scales – Full Sample*

	Predatory Person (*n* = 388)	Predatory Property (*n* = 388)	Illegal Services (*n* = 386)	Public Disorder (*n* = 388)	Deviance (*n* = 392)	Alcohol/Drug (*n* = 386)
0 items	125 (32.2%)	142 (36.6%)	207 (53.6%)	64 (16.5%)	28 (7.1%)	81 (21.0%)
1 item	108 (27.8%)	68 (17.5%)	73 (18.9%)	85 (21.9%)	59 (15.1%)	87 (22.5%)
2 items	65 (16.8%)	45 (11.6%)	39 (10.1%)	74 (19.1%)	64 (16.3%)	53 (13.7%)
3 items	33 (8.5%)	19 (4.9%)	21 (5.4%)	66 (17.0%)	101 (25.8%)	46 (11.9%)
4 items	25 (6.4%)	28 (7.2%)	35 (9.1%)	36 (9.3%)	63 (16.1%)	27 (7.0%)
5 items	15 (3.9%)	23 (5.9%)	7 (1.8%)	21 (5.4%)	56 (14.3%)	20 (5.2%)
6 items	15 (3.9%)	21 (5.4%)	4 (1.0%)	18 (4.6%)	21 (5.4%)	11 (2.8%)
7 items	1 (0.3%)	14 (3.6%)	-	18 (4.6%)	-	16 (4.1%)
8 items	1 (0.3%)	13 (3.4%)	-	6 (1.5%)	-	10 (2.6%)
9 items	-	15 (3.9%)	-	-	-	15 (3.9%)
10 items	-	-	-	-	-	20 (5.2%)
Total	388 (100%)	388 (100%)	386 (100%)	388 (100%)	392 (100%)	386 (100%)

When looking at the two subscales for alcohol and drug use, one sees that a slight majority of respondents have engaged in 2 – 3 behaviors listed under "Alcohol/Soft Drug Use" while approximately 75% of respondents have partaken in one or fewer forms of hard drugs (Table 21).

Table 21: *Frequencies and Percentages for DV Subscales – Full Sample*

	Soft Alcohol/Drug Use (*n* = 388)	Hard Drug Use (*n* = 386)
0 items	84 (21.6%)	250 (64.8%)
1 item	94 (24.2%)	39 (10.1%)
2 items	68 (17.5%)	19 (4.9%)
3 items	142 (34.7%)	13 (3.4%)
4 items	-	19 (4.9%)
5 items	-	10 (2.6%)
6 items	-	16 (4.1%)
7 items	-	20 (5.2%)
Total	388 (100%)	386 (100%)

A more in-depth look at alcohol and drug usage is presented in Table 22. When looking at overall substance use, a majority of respondents report not using hard drugs whereas alcohol and marijuana use is high. Over 50% of the sample reported using marijuana, while nearly three-

fourths of the sample reported using alcohol while younger than the legal drinking age. Of the three items used in the "Alcohol/Soft Drugs" subscale, only tobacco was used by less than half of the respondents (45.1%).

Table 22: *Frequencies and Percentages for Drug/Alcohol Use – Full Sample*

	No	Yes	Total
Tobacco	213 (54.9%)	175 (45.1%)	388 (100%)
Alcohol – Underage	102 (26.3%)	286 (73.7%)	388 (100%)
Marijuana	193 (49.7%)	195 (50.3%)	388 (100%)
Hallucinogens	313 (80.9%)	74 (19.1%)	387 (100%)
Amphetamines	326 (84.5%)	60 (15.5%)	386 (100%)
Barbiturates	337 (87.1%)	50 (12.9%)	387 (100%)
Heroin	329 (85.0%)	58 (15.0%)	387 (100%)
Cocaine	291 (75.2%)	96 (24.8%)	387 (100%)
Methamphetamines	357 (92.2%)	30 (7.8%)	387 (100%)
Pain Killers – No P_x	277 (71.6%)	110 (28.4%)	387 (100%)

University students. When looking at the frequency of deviant, delinquent, and criminal behaviors exhibited by the university student sample one sees similar patterns of behavior in comparison to the entire sample. Simply, for most dependent variable scales, the majority of respondents report engaging in 0 – 2 deviant and criminal behaviors per scale (Table 23). However, there are slight differences. When looking at the "Predatory Crimes Against People" scale, one sees that no respondents reported taking part in 6 – 8 of the behaviors listed; 4.5% of the total sample claimed to take part in 6 – 8 of those behaviors. Similarly, when viewing the "Illegal Services" scale, one sees that no respondents engaged in any more than three of those behaviors, whereas 11.9% of the total sample reported engaging in 4 – 6 of the listed illegal service behaviors.

Table 23: *Frequencies and Percentages for DV Scales – University Students*

	Predatory Person (n = 284)	Predatory Property (n = 283)	Illegal Services (n = 280)	Public Disorder (n = 283)	Deviance (n = 287)	Alcohol/Drug (n = 282)
0 items	119 (41.9%)	138 (48.8%)	194 (69.3%)	62 (48.8%)	27 (9.4%)	79 (28.0%)

1 item	97 (34.2%)	62 (21.9%)	58 (20.7%)	79 (27.9%)	54 (18.8%)	84 (29.8%)
2 items	47 (16.5%)	32 (11.3%)	21 (7.5%)	68 (24.0%)	52 (18.1%)	46 (16.3%)
3 items	13 (4.6%)	14 (4.9%)	7 (2.5%)	51 (18.0%)	90 (31.4%)	36 (12.8%)
4 items	4 (1.4%)	19 (6.7%)	0 (0%)	17 (6.0%)	47 (16.4%)	15 (5.3%)
5 items	4 (1.4%)	11 (3.9%)	0 (0%)	2 (0.7%)	14 (4.9%)	8 (2.8%)
6 items	0 (0%)	6 (2.1%)	0 (0%)	1 (0.4%)	3 (1.0%)	4 (1.4%)
7 items	0 (0%)	0 (0%)	-	3 (1.1%)	-	5 (1.8%)
8 items	0 (0%)	1 (0.4%)	-	0 (0%)	-	4 (1.4%)
9 items	-	0 (0%)	-	-	-	1 (0.4%)
10 items	-	-	-	-	-	0 (0.0%)
Total	284 (100%)	283 (100%)	280 (100%)	283 (100%)	287 (100%)	282 (100%)

The same general pattern held for drug and alcohol use as well (Table 24). Approximately 71% of the student sample reported drinking alcohol or smoking tobacco or marijuana, but almost 83% reported never using a hard drug; 91.1% reported using one hard drug or less.

Table 24: *Frequencies and Percentages for DV Subscales – University Students*

	Soft Alcohol/Drug Use (n = 284)	Hard Drug Use (n = 282)
0 items	82 (28.9%)	233 (82.6%)
1 item	87 (30.6%)	24 (8.5%)
2 items	53 (18.7%)	10 (3.5%)
3 items	62 (21.8%)	4 (1.4%)
4 items	-	5 (1.8%)
5 items	-	5 (1.8%)
6 items	-	1 (0.4%)
7 items	-	0 (0%)
Total	284 (100%)	282 (100%)

County jail inmates. When looking at the frequency of the self-reported behaviors of the county jail inmate sample, one sees different frequency of offending when compared to the university student sample (Table 25). Not surprisingly, members of the county jail inmate sample reported a higher frequency of engaging in the activities being studied. For example, only 5.8% of inmates claimed to have taken part in no predatory crimes against people and even fewer (3.8%) admitted to engaging in zero predatory crimes against property. Thus, approximately

94% of inmates committed at least one crime against a person and 96% of inmates committed at least one property crime. Additionally, while nearly 70% of students have not taken part in any illegal services crimes, almost 88% of participants in the inmate sample reported engaging in at least one type of illegal service crime. And unlike the university student sample, at least one county jail participant reported taking part in each deviant, delinquent, or criminal activity within each scale.

Table 25: *Frequencies and Percentages for DV Scales – Inmates*

	Predatory Person (*n* = 104)	Predatory Property (*n* = 105)	Illegal Services (*n* = 106)	Public Disorder (*n* = 105)	Deviance (*n* = 105)	Alcohol/Drug (*n* = 104)
0 items	6 (5.8%)	4 (3.8%)	13 (12.3%)	2 (1.9%)	1 (1.0%)	2 (1.9%)
1 item	11 (10.6%)	6 (5.7%)	15 (14.2%)	6 (5.7%)	5 (4.8%)	3 (2.9%)
2 items	18 (17.3%)	13 (12.4%)	18 (17.0%)	6 (5.7%)	12 (11.4%)	7 (6.7%)
3 items	20 (19.2%)	5 (4.8%)	14 (13.2%)	15 (14.3%)	11 (10.5%)	10 (9.6%)
4 items	21 (20.2%)	9 (8.6%)	35 (33.0%)	19 (18.1%)	16 (15.2%)	12 (11.5%)
5 items	11 (10.6%)	12 (11.4%)	7 (6.6%)	19 (18.1%)	42 (40.0%)	12 (11.5%)
6 items	15 (14.4%)	15 (14.3%)	4 (3.8%)	17 (16.2%)	18 (17.1%)	7 (6.7%)
7 items	1 (1.0%)	14 (13.3%)	-	15 (14.3%)	-	11 (10.6%)
8 items	1 (1.0%)	12 (11.4%)	-	6 (5.7%)	-	6 (5.8%)
9 items	-	15 (14.3%)	-	-	-	14 (13.5%)
10 items	-	-	-	-	-	20 (19.2%)
Total	104 (100%)	105 (100%)	106 (100%)	105 (100%)	105 (100%)	104 (100%)

When examining specific drug and alcohol use tendencies amongst county jail inmates, the same general pattern emerges, especially in the alcohol/soft drug use subscale (Table 26). Simply, very few inmates (1.9%) reported never smoking a cigarette, marijuana, or drinking alcohol. The frequency and percentage of hard drug use shows no discernible pattern with 14.4% of participants reporting use of only one form of hard drug and nearly 20% reporting use of all seven forms of hard drugs, while only 4.8% report using five types and 8.7% report using two or three types.

Table 26: *Frequencies and Percentages for DV Subscales – Inmates*

	Alcohol/Soft Drug Use (n = 104)	Hard Drug Use (n = 104)
0 items	2 (1.9%)	17 (16.3%)
1 item	7 (6.7%)	15 (14.4%)
2 items	15 (14.4%)	9 (8.7%)
3 items	80 (76.9%)	9 (8.7%)
4 items	-	14 (13.5%)
5 items	-	5 (4.8%)
6 items	-	15 (14.4%)
7 items	-	20 (19.2%)
Total	104 (100%)	104 (100%)

An independent samples t-test revealed that there are statistically significant differences in the deviant, delinquent, and criminal behaviors reported by university students and the county jail inmates for all six dependent variable scales and both subscales (Table 27). Students reported committing significantly fewer deviant, delinquent, and criminal acts, which is not a surprising result given the fact that the more criminally inclined sample group was surveyed while they were incarcerated.

Table 27: *Independent Samples T-Test: DV Scales – Sample Groups*

Predatory Person	-16.279**
Predatory Property	-18.336**
Illegal Services	-19.019**
Public Disorder	-16.906**
Deviance	-10.983**
Alcohol/Drug Use	-18.116**
Alcohol/Soft Drug Use	-11.384**
Hard Drug Use	-17.412**

**$p < .001$

White respondents. When looking solely at white respondents, self-reported patterns of offending are comparable to the overall sample (Table 28). The percentage of respondents who engaged in person-based, property-based, and illegal service crimes decreased as the number of

behaviors increased, which mirrors the total sample. Additionally, the frequency of white participants who engaged in public disorder behaviors is similar to the overall sample; the highest frequency of respondents reported taking part in one public disorder item and then the frequency percentages decreased. Regarding general deviance of white respondents, the frequency of self-reported behavior gradually peaked at three items and then decreased; this same pattern is seen when analyzing the entire sample. This is not surprising given the fact that white respondents make up approximately 80% of the sample that is being analyzed.

Table 28: *Frequencies and Percentages for DV Scales – White Respondents*

	Predatory Person (n = 313)	Predatory Property (n = 312)	Illegal Services (n = 313)	Public Disorder (n = 313)	Deviance (n = 314)	Alcohol/Drug (n = 315)
0 items	112 (35.8%)	123 (39.4%)	186 (59.4%)	55 (17.6%)	24 (7.6%)	68 (21.6%)
1 item	91 (29.1%)	58 (18.6%)	55 (17.6%)	77 (24.6%)	52 (16.6%)	77 (24.4%)
2 items	52 (16.6%)	33 (10.6%)	32 (10.2%)	64 (20.4%)	56 (17.8%)	42 (13.3%)
3 items	26 (8.3%)	13 (4.2%)	13 (4.2%)	54 (17.3%)	85 (27.1%)	37 (11.7%)
4 items	16 (5.1%)	24 (7.7%)	21 (6.7%)	24 (7.7%)	46 (14.6%)	18 (5.7%)
5 items	9 (2.9%)	19 (6.1%)	3 (1.0%)	16 (5.1%)	39 (12.4%)	12 (3.8%)
6 items	7 (2.2%)	18 (5.8%)	3 (1.0%)	9 (2.9%)	12 (3.8%)	11 (3.5%)
7 items	0 (0%)	6 (1.9%)	-	12 (3.8%)	-	13 (4.1%)
8 items	0 (0%)	8 (2.6%)	-	2 (0.6%)	-	8 (2.5%)
9 items	-	10 (3.2%)	-	-	-	12 (3.8%)
10 items	-	-	-	-	-	17 (5.5%)
Total	313 (100%)	312 (100%)	313 (100%)	313 (100%)	314 (100%)	315 (100%)

When looking at the self-reported drug and alcohol use of white respondents (Table 29), one sees a pattern similar to the overall sample. For example, in the alcohol/soft drug use scale one sees a gradual movement from 22.5% of participants reporting zero items to approximately 35% of respondents reporting all three items on the subscale. Similar to the overall sample, users report the same general use frequencies in the hard drug use scale with most white respondents (66.3%) claiming that they have never used any of the drugs listed. Frequency of use varies between 2.9% and 9.5% for the other six items.

Table 29: *Frequencies and Percentages for DV Subscales – White Respondents*

	Alcohol/Soft Drug Use (n = 316)	Hard Drug Use (n = 315)
0 items	71 (22.5%)	209 (66.3%)
1 item	82 (25.9%)	30 (9.5%)
2 items	50 (15.8%)	13 (4.1%)
3 items	113 (35.8%)	10 (3.2%)
4 items	-	15 (4.8%)
5 items	-	9 (2.9%)
6 items	-	12 (3.8%)
7 items	-	17 (5.4%)
Total	316 (100%)	315 (100%)

Non-white respondents. The frequency of offending reported by non-white respondents does not follow patterns similar to those of their counterparts or to the overall sample. When looking at all six dependent variable scales (Table 30), the frequency of behaviors engaged in varies up and down from item to item.

Table 30: *Frequencies and Percentages for DV Scales – Non-White Respondents*

	Predatory Person (n = 66)	Predatory Property (n = 67)	Illegal Services (n = 64)	Public Disorder (n = 66)	Deviance (n = 67)	Alcohol/Drug (n = 66)
0 items	11 (16.7%)	16 (23.9%)	17 (26.6%)	9 (13.6%)	4 (6.0%)	13 (19.7%)
1 item	17 (25.8%)	9 (13.4%)	16 (25.0%)	7 (10.6%)	5 (7.5%)	9 (13.6%)
2 items	9 (13.6%)	11 (16.4%)	7 (10.9%)	7 (10.6%)	6 (9.0%)	10 (15.2%)
3 items	6 (9.1%)	6 (9.0%)	7 (10.9%)	8 (12.1%)	14 (20.9%)	8 (12.1%)
4 items	7 (10.6%)	1 (10.5%)	12 (18.8%)	12 (18.2%)	13 (19.4%)	8 (12.1%)
5 items	6 (9.1%)	3 (4.5%)	4 (6.3%)	5 (7.6%)	17 (25.4%)	7 (10.6%)
6 items	8 (12.1%)	3 (4.5%)	1 (1.6%)	9 (13.6%)	8 (11.9%)	0 (0.0%)
7 items	1 (1.5%)	8 (11.9%)	-	5 (7.6%)	-	3 (4.5%)
8 items	1 (1.5%)	5 (7.5%)	-	4 (6.1%)	-	2 (3.0%)
9 items	-	5 (7.5%)	-	-	-	3 (4.5%)
10 items	-	-	-	-	-	3 (4.5%)
Total	66 (100%)	67 (100%)	64 (100%)	66 (100%)	67 (100%)	66 (100%)

Despite this fluctuation, non-white respondents report substance use patterns that follow the same general pattern to that of white respondents (Table 31).

Table 31: *Frequencies and Percentages for DV Subscales – Non-White Respondents*

	Alcohol/Soft Drug Use (n = 66)	Hard Drug Use (n = 66)
0 items	13 (19.7%)	38 (57.6%)
1 item	11 (16.7%)	9 (13.6%)
2 items	14 (21.2%)	5 (7.6%)
3 items	28 (42.4%)	2 (3.0%)
4 items	-	4 (6.1%)
5 items	-	1 (1.5%)
6 items	-	4 (6.1%)
7 items	-	3 (4.5%)
Total	66 (100%)	66 (100%)

An independent samples t-test (Table 32) reveals that the patterns of behavior reported by white and non-white respondent differed significantly in five of the six dependent variable scales (predatory person, predatory property, illegal services, public disorder, and general deviance). Regarding these five scales, the white respondents self-reported significantly fewer acts of deviance, delinquency, and criminal behavior. With respect to the substance abuse scale (and both subscales), the patterns of behavior did not differ significantly based on race and white respondent were less likely to report taking part in any type of drug or alcohol use. It will be interesting to see if differences in parenting style contribute to any of these differences in behavior.

Table 32: *Independent Samples T-Test: DV Scales – Race*

Predatory Person	5.802**
Predatory Property	3.552**
Illegal Services	5.472**
Public Disorder	5.206**
Deviance	4.065**
Alcohol/Drug Use	.935
Alcohol/Soft Drug Use	1.345
Hard Drug Use	0.573

**$p < .001$

Females. Female respondents' self-reports of deviant and criminal behavior is similar in frequency across all dependent variable scales to the overall sample (Table 33). Simply, the frequency of offending decreased as the number of negative behaviors increased. It is not surprising that frequency scores for the female participants correspond to the frequency scores for the entire sample because females represent almost 62% of the sample; similar patterns were seen for white respondents and university students.

Table 33: *Frequencies and Percentages for DV Scales – Females*

	Predatory Person (*n* = 237)	Predatory Property (*n* = 236)	Illegal Services (*n* = 234)	Public Disorder (*n* = 236)	Deviance (*n* = 237)	Alcohol/Drug (*n* = 239)
0 items	93 (39.2%)	107 (45.3%)	150 (64.1%)	49 (20.8%)	18 (7.6%)	58 (24.3%)
1 item	77 (32.5%)	49 (20.8%)	48 (20.5%)	68 (28.8%)	42 (17.7%)	67 (28.0%)
2 items	40 (16.9%)	34 (14.4%)	19 (8.1%)	52 (22.0%)	43 (18.1%)	38 (15.9%)
3 items	12 (5.1%)	10 (4.2%)	5 (2.1%)	37 (15.7%)	69 (29.1%)	26 (10.9%)
4 items	10 (4.2%)	13 (5.5%)	7 (3.0%)	17 (7.2%)	40 (16.9%)	11 (4.6%)
5 items	3 (1.3%)	11 (4.7%)	4 (1.7%)	6 (2.5%)	24 (10.1%)	10 (4.2%)
6 items	1 (0.4%)	8 (3.4%)	1 (0.4%)	6 (2.5%)	1 (0.4%)	6 (2.5%)
7 items	0 (0%)	1 (0.4%)	-	0 (0%)	-	9 (3.8%)
8 items	1 (0.4%)	1 (0.4%)	-	1 (0.4%)	-	5 (2.1%)
9 items	-	2 (0.8%)	-	-	-	5 (2.1%)
10 items	-	-	-	-	-	4 (1.7%)
Total	237 (100%)	236 (100%)	234 (100%)	236 (100%)	237 (100%)	239 (100%)

In addition, the pattern of alcohol and soft drug use was comparable to the total sample (Table 34). Regarding the alcohol/soft drug use scale, the frequency of use increased from zero to one item, then decreased at two items before increasing at three items; this particular result has been seen throughout the analyses. On the other hand, the frequency of hard drug use by female respondents decreased as the number of items increased.

Table 34: *Frequencies and Percentages for DV Subscales – Females*

	Alcohol/Soft Drug Use (*n* = 239)	Hard Drug Use (*n* = 239)
0 items	59 (24.7%)	182 (76.2%)
1 item	70 (29.3%)	16 (6.7%)

2 items	44 (18.4%)	8 (3.3%)
3 items	66 (27.6%)	8 (3.3%)
4 items	-	11 (4.6%)
5 items	-	5 (2.1%)
6 items	-	5 (2.1%)
7 items	-	4 (1.7%)
Total	239 (100%)	239 (100%)

Males. Frequencies of offending statistics for male respondents follow patterns similar to female respondents or to the overall sample (Tables 35). More specifically, as the number of deviant, delinquent, and criminal behaviors increases the frequency of engaging in those activities appears to decrease.

Table 35: *Frequencies and Percentages for DV Scales – Males*

	Predatory Person (n = 145)	Predatory Property (n = 146)	Illegal Services (n = 146)	Public Disorder (n = 146)	Deviance (n = 146)	Alcohol/Drug (n = 145)
0 items	30 (20.7%)	33 (22.6%)	54 (37.0%)	15 (10.3%)	10 (6.8%)	23 (15.9%)
1 item	31 (21.4%)	17 (11.6%)	23 (15.8%)	16 (11.0%)	15 (10.3%)	19 (13.1%)
2 items	23 (15.9%)	11 (7.5%)	19 (13.0%)	19 (13.0%)	20 (13.7%)	14 (9.7%)
3 items	20 (13.8%)	9 (6.2%)	16 (11.0%)	27 (18.5%)	29 (19.9%)	20 (13.8%)
4 items	14 (9.7%)	13 (8.9%)	28 (19.2%)	19 (13.0%)	21 (14.4%)	16 (11.0%)
5 items	12 (8.3%)	12 (8.2%)	3 (2.1%)	15 (10.3%)	32 (21.9%)	10 (6.9%)
6 items	14 (9.7%)	13 (8.9%)	3 (2.1%)	12 (8.2%)	19 (13.0%)	5 (3.4%)
7 items	1 (0.7%)	13 (8.9%)	-	18 (12.3%)	-	7 (4.8%)
8 items	0 (0%)	12 (8.2%)	-	5 (3.4%)	-	5 (3.4%)
9 items	-	13 (8.9%)	-	-	-	10 (6.9%)
10 items	-	-	-	-	-	16 (11.0%)
Total	145 (100%)	146 (100%)	146 (100%)	146 (100%)	146 (100%)	145 (100%)

Similar to the female sample and the overall sample, male respondents were likely to engage in all three categories of alcohol/soft drug use (Table 36). The pattern of hard drug use amongst male respondents mirrored hard drug use amongst county jail inmates. A high percentage of respondents (45.5%) reported using no hard drugs. That percentage gradually decreased to 3.4% for three items. At four items, the percentage increased to 5.5% before falling back to 3.4% for five items; the percentage gradually increased over six and seven items.

Table 36: *Frequencies and Percentages for DV Subscales – Males*

	Alcohol/Soft Drug Use (n = 146)	Hard Drug Use (n = 145)
0 items	25 (17.1%)	66 (45.5%)
1 item	23 (15.8%)	23 (15.9%)
2 items	22 (15.1%)	11 (7.6%)
3 items	76 (52.1%)	5 (3.4%)
4 items	-	8 (5.5%)
5 items	-	5 (3.4%)
6 items	-	11 (7.6%)
7 items	-	16 (11.0%)
Total	146 (100%)	145 (100%)

An independent samples t-test was conducted in order to determine the significance of the mean differences between the behavior of male respondents and the behavior of female respondents. In all six dependent variable scales and both subscales, males were significantly more likely than females to engage in deviant, delinquent, and criminal activity (Table 37). Given these differences, it will be interesting to analyze the effects that perceived parenting styles have on self-reported behavior.

Table 37: *Independent Samples T-Test: DV Scales – Sex*

Predatory Person	-7.583**
Predatory Property	-9.381**
Illegal Services	-7.269**
Public Disorder	-9.136**
Deviance	-4.848**
Alcohol/Drug Use	-6.089**
Alcohol/Soft Drug Use	-4.387**
Hard Drug Use	-5.886**

**$p < .01$

The results generated by analyzing the frequencies and descriptive statistics of the overall sample, as well the analyses of the student, inmate, white, non-white, female, and male respondents specifically, suggest that there are differences in deviant and criminal behavior

based on race, sex, and institutional affiliation. Given these significant differences, it is imperative to determine if parenting style contributes to the decision to engage in the behaviors discussed above. In order to determine the effect that parenting style has on behavior, the researcher has conducted a multiple regression analysis. Before reporting the results of the multiple regression analysis, however, the results of a bivariate correlation analysis of the independent variables are discussed in the next section.

Bivariate Correlations

The purpose of the bivariate correlational analysis was to examine whether significant relationships existed between the variables. Additionally, this analytical procedure was undertaken in order to test for multicollinearity. In order to meet the assumptions for multiple regression analysis, multicollinearity must be absent. The results for the bivariate correlation matrix are presented in Table 38.

An examination of the bivariate correlation matrix reveals that several independent variables were significantly correlated with one another. The highest correlations amongst the independent variables occurred between the parenting variables. For example, maternal authoritativeness and maternal neglecting/rejecting were the most highly correlated of all the independent variables ($r = -.709$, $p < .001$). Additionally, the relationship between paternal authoritativeness and paternal neglecting/rejecting also was highly correlated ($r = -.625$, $p < .001$). Given the nature of the authoritative type of parenting and the neglecting/rejecting type of parenting, the suggestion that these two parenting types are negatively correlated is not surprising. As discussed earlier, authoritative parents are communicative with their children, yet demanding at the same time; neglecting/rejecting parents, on the other hand, do not interact with

Table 38: *Bivariate Correlation Matrix*

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1 Mother	1.00									
Authoritarian	(395)									
2 Mother	-.285**	1.00								
Authoritative	(384)	(387)								
3 Mother	-.461**	.341**	1.00							
Permissive	(390)	(382)	(392)							
4 Mother	.095	-.709**	.003	1.00						
Neglect/Reject	(387)	(379)	(384)	(389)						
5 Father	.289**	-.044	-.029	.119*	1.00					
Authoritarian	(348)	(341)	(346)	(342)	(353)					
6 Father	.014	.275**	.096	-.226**	-.372**	1.00				
Authoritative	(343)	(336)	(341)	(338)	(345)	(348)				
7 Father	-.118*	-.009	.404**	.068	-.472**	.407**	1.00			
Permissive	(345)	(338)	(344)	(339)	(345)	(343)	(350)			
8 Father	-.048	-.313**	.074	.383**	.053	-.625**	.067	1.00		
Neglect/Reject	(344)	(337)	(342)	(338)	(344)	(341)	(344)	(349)		
9 Race	.166**	-.073	-.122*	.082	.026	-.086	.003	.028	1.00	
	(378)	(371)	(376)	(373)	(342)	(337)	(339)	(338)	(391)	
10 Sex	-.040	-.010	.040	-.075	-.020	.000	.044	-.003	-.114*	1.00
	(381)	(374)	(379)	(376)	(344)	(339)	(341)	(340)	(390)	(394)

**$p \leq .01$, *$p \leq .05$

their children or hold them to standards of conduct. Simply, one would have a difficult time finding two parenting types that are more different than authoritative and neglecting/rejecting.

Strong significant negative correlations also exist between authoritarian mothers and permissive mothers (r = -.461, p < .001) as well as authoritarian fathers and permissive fathers (r = -.472, p < .001). Again, these strong negative correlations make sense because authoritarian parents are very demanding of their children, but do not openly communicate with them, while permissive parents are the complete opposite – they strive to be open and friendly with their children, but fail to provide proper discipline and standards of conduct.

Not surprisingly, significant positive correlations exist between authoritarian mothers and fathers, authoritative mothers and fathers, permissive mothers and fathers, and neglecting/rejecting mothers and fathers. Additionally, significant negative correlations exist between authoritarian mothers and permissive fathers, authoritative mothers and neglecting/rejecting fathers, and neglecting/rejecting mothers and authoritative fathers. Altogether, the results of the correlations suggest that the independent variables that should be correlated with each other are correlated with each other and that the correlations are in the correct direction.

Multiple Regression

Many of the analyses discussed above report interesting findings about the relationships between certain variables, but they are somewhat limited in their ability to draw significant conclusions about the cause and effect questions that this study seeks to answer. Thus, multiple regression analysis was used to determine how parenting style affects the reported levels of deviance, delinquency, and criminality of the respondents. More specifically, the multiple regression analysis sought to determine how maternal and paternal parenting styles, such as

authoritarian, authoritative, permissive, and neglecting/rejecting, along with race and sex variables, affect offense variables such as crimes against people, crimes against property, illegal service offenses, public disorder crimes, general deviant behaviors, and drug and alcohol use. Again, the multiple regression equation used in the study looks like this:

$$\hat{Y} = B_0 + B_1X_1 + B_2X_2 + \ldots + B_kX_k + \hat{e}_i$$

Where:

$\hat{Y}$ = the predicted value of the dependent variable, level of criminal involvement

B_0 = the y-intercept when $X = 0$; or, the constant

B = the slope of the regression line

X_1 = sex

X_2 = race

X_3 = maternal authoritarian parenting style

X_4 = maternal authoritative parenting style

X_5 = maternal neglecting/rejecting parenting style

X_6 = maternal permissive parenting style

X_7 = paternal authoritarian parenting style

X_8 = paternal authoritative parenting style

X_9 = paternal neglecting/rejecting parenting style

X_{10} = paternal permissive parenting style

$\hat{e}_i$ = the predicted error term

The multiple regression analysis is divided into three models. The first model analyzes the effects of the parenting variables, race, and sex on each of the six offense scales and two subscales. Subsequent models examine the effect that parenting style has on offending when:

university students are compared to county jail inmates and females are compared to males. The following discusses each regression model.

Model One: Effect of Parenting Style on Deviant, Delinquent, and Criminal Behavior – Full Sample

For the initial analysis, a linear regression was conducted using all of the parenting style variables, race, and sex as independent variables. Each of the dependent variable scales and subscales were analyzed. Instead of deleting the responses of participants who did not respond to each item, the researcher replaced all missing values with the mean value (this also was done for Model Two and Three). The following illustrates the significant findings for the regression analyses using the entire sample.

Predatory property crimes. In Table 39, the R-square statistic reports the proportion of variance in the predatory property crimes scale (the dependent variable) that is explained by each of the independent variables. As an R-square value moves further away from 0 and closer to 1, theory suggests that an independent variable (or series of independent variables) account for more of the variation in the dependent variable. The R-square value in this model is .272. This suggests that the independent variables account for 27.2% of the variance in predatory property crimes committed by all participants. Additionally, the F in this model is 14.820 (Sig. < .0001), which suggests that at least one slope in the regression equation does not equal zero. Therefore, at least one of the independent variables is significant.

Table 39: *Full Sample – Predatory Property*

	B (SE)	Beta
Constant	4.621 (1.664)	-
Maternal Neglect/Reject	-.111 (.042)	-.175**
Race	-.757 (.309)	-.108*
Sex	2.155 (.240)	.391**

R-Square = .272

F = 14.820
SE = 2.274

**$p \leq .01$; *$p \leq .05$

When looking at Table 39, one sees that three of the independent variables are significant: maternal neglecting/rejecting, race, and sex. With regards to the demographic variables, the results of this model suggest that the level of predatory property offending is likely to be lower for whites compared to non-whites and that males are more likely than females to be engaged in property crimes. Only one parenting style variable attained significance in this model. Results suggest that the likelihood of committing a property offense significantly decreases when a child is reared by a mother who is not neglecting/rejecting. This suggestion is in agreement with prior research.

Predatory person crimes. Table 40 reports the effect that the independent variables have on level of predatory offenses against people. The R-square for this model is .236, which suggests that the independent variables account for 23.6% of the variance in predatory person crimes committed by the sample of respondents. The F in this model is 12.294 (Sig. < .0001); again, this suggests that at least one of the independent variables is significant.

Table 40: *Full Sample – Predatory Person*

	B (SE)	Beta
Constant	1.742 (1.070)	
Paternal Permissive	.079 (.028)	.176**
Race	-.991 (.199)	-.225**
Sex	1.094 (.154)	.316**
R-Square = .236		
F = 12.294		
SE = 1.462		

**$p \leq .01$

As reported in Table 40, the demographic variables of race and sex are significant once again. Results suggest that white respondents are significantly less likely than non-white

participants to commit crimes against people. Also, males are significantly more likely than females to commit predatory crimes against people. Results also suggest predatory crimes against people are likely to increase if one does not have a permissive father. This seems to contradict prior research, which suggests that permissive parenting leads to increased offending.

Illegal services crimes. The effect that the independent variables have on illegal service crimes is reported in Table 41. The R-square of the model is .219, which means that 21.9% of the variance in illegal services offending is accounted for by the independent variables. Additionally, given the F score of 11.117 (Sig. < .0001) it can be determined that at least one of the independent variables is significant.

Table 41: *Full Sample – Illegal Services*

	B (SE)	Beta
Constant	3.079 (1.123)	
Race	-.782 (.176)	-.203**
Sex	.932 (.137)	.307**
R-Square = .219		
F = 11.117		
SE = 1.297		

**$p \leq .01$

Consistent with the previous models, race and sex are both significant predictors of offending behavior. White respondents are significantly less likely to commit illegal service crimes; male respondents are significantly more likely to commit illegal service crimes. No parenting variables were significant.

Public disorder offenses. As reported in Table 42, the R-square for the model examining the effect of the independent variables on public disorder offenses is .289. This suggests that the independent variables account for 28.9% of the variance in public disorder behaviors. Of all R-square values calculated to this point, the value in this model is the largest. The F-score is also

large and significant, 16.169 (Sig. < .0001), suggesting that at least one independent variable also is significant.

Table 42: *Full Sample – Public Disorder*

	B (SE)	Beta
Constant	1.893 (1.240)	
Paternal Permissive	.091 (.033)	.170**
Race	-.956 (.231)	-.181**
Sex	1.583 (.176)	.381**
R-Square = .289		
F = 16.169		
SE = 1.695		

**$p \leq .01$

By looking at the table, one can see that both demographic variables (race and sex) remain significant and continue to predict behavior. Also related to earlier models, is the finding that public disorder offending is likely to increase when the respondents are not parented by permissive male caretakers.

Deviant behaviors. The R-square for the full sample deviant behaviors model is .137. This suggests that the independent variables account for 13.7% of the variance in the deviant behaviors scale. In addition to being the lowest R-square value up to this point, the F-score also is small despite the fact that it is significant; 6.305 (Sig. < .0001). Based on the F-score it is likely that at least one of the independent variables is significant. When looking at Table 43, one can see that three independent variables are significant.

Table 43: *Full Sample – Deviant Behaviors*

	B (SE)	Beta
Constant	3.836 (1.271)	
Race	-.672 (.203)	-.159**
Sex	.696 (.157)	.210**
R-Square = .137		
F = 6.305		

SE = 1.493

**$p \leq .01$

Both demographic variables are significant. Being white remains a significant predictor of not engaging in negative behaviors – general deviance, in this instance – and being female also remains a significant predictor of the reduced likelihood of engaging in deviant behaviors. Again, no parenting styles achieve a level of significance in this model.

Alcohol/Drugs. The full sample alcohol/drug use model produced an R-square of .170, which suggests that the independent variables account for 17% of the variance in alcohol and drug use. The F-score in this model is 5.775 (Sig. ≤ .0001) which is significant and suggests that at least one independent variable in this model is significant. Looking at Table 44, one sees that two of the independent variables reach significance.

Table 44: *Full Sample – All Alcohol/Drug Use*

	B (SE)	Beta
Constant	3.989 (2.413)	
Maternal Neglect/Reject	-.161 (.066)	-.223*
Sex	1.773 (.346)	.286**
R-Square = .170		
F = 5.775		
SE = 2.805		

**$p \leq .01$; *$p \leq .05$

Once again, sex is a significant predictor of the dependent variable; in this instance, males are significantly more likely to use alcohol and drugs. The presence of neglecting/rejecting maternal caretakers is significantly predictive of an increased level of alcohol and drug use. Simply, if one is parented by a mother who is not neglecting/rejecting, they are less likely to use alcohol and other drugs.

Subscale: Alcohol/Soft Drugs. The model for the first subscale had an R-square of .133 (Table 45). This suggests that the independent variables accounted for 13.3% of the variance in

alcohol and soft drug use. The F in this model was significant, 4.348 (Sig. ≤ .0001), which suggests that at least one of the independent variables in this model was significant. Three independent variables were a significant predictor of alcohol and soft drug. First, sex is a significant predictor of alcohol, tobacco, and marijuana use – males are significantly more likely to use these substances. Similar to the full alcohol and drug use scale, the presence of a neglecting/rejecting caretaker suggests that respondents will use these types of substances. This time, however, it is a paternal caretaker who has that effect. Third, the presence of a permissive paternal caretaker suggests a significantly decreased likelihood of alcohol, tobacco, and marijuana use**.**

Table 45: *Full Sample – Alcohol/Soft Drug Use*

	B (SE)	Beta
Constant	1.969 (.955)	
Paternal Permissive	.074 (.024)	.248**
Paternal Neglect/Reject	-.049 (.022)	-.187*
Sex	.549 (.137)	.228**
R-Square = .133		
F = 4.348		
SE = 1.115		

**$p \leq .01$; *$p \leq .05$

Subscale: Hard drugs. The final full scale model examined hard drug use. The R-square for this model is .130, thus suggesting that the independent variables account for 13.0% of the variance in hard drug usage amongst the respondents. The F-score for the model is 5.957 (Sig. < .0001), which means it is likely that there is at least one significant independent variable. Looking at Table 46, one sees two significant independent variables.

Table 46: *Full Sample – Hard Drug Use*

	B (SE)	Beta
Constant	.792 (1.433)	
Maternal Neglect/Reject	-.092 (.036)	-.184*
Sex	1.162 (.206)	.268**
R-Square = .130		
F = 5.957		
SE = 1.958		

**$p \leq .01$; *$p \leq .05$

As with each previous model, sex is a significant predictor of hard drug usage. Simply, males are more likely than females to engage in this type of criminal behavior. The presence of a maternal neglecting/rejecting caretaker, once again, significantly predicts an increased likelihood of engaging in deviant and criminal behavior, as usage is likely to drop if an individual has a more responsive mother.

Summary. The findings generated throughout this first set of eight models were both expected and surprising. In all instances, sex was a significant predictor of deviant, delinquent, and criminal behaviors with males being more likely than females to engage in those behaviors. This finding was not wholly unexpected given the prevailing notion that men are more criminal than women. A consensus of the prior literature suggests that children with authoritative parents are significantly less likely than children of all other parenting types to engage in deviant and criminal behaviors. Yet, authoritative parenting did not significantly predict anything in the full sample. The findings that the level of involvement in criminality and delinquency reported by respondents is linked to the type of mother they had is important. Simply stated, respondents who were raised by someone other than a neglecting/rejecting mother reported significantly lower levels of property crimes, overall alcohol/drug use, and hard drug use. Finally, the type of father one has is related to the level of delinquency and criminal activity reported by

respondents. In short, there were increased levels of person-based crimes, public disorder offenses, and soft drug/alcohol use when one is not raised by a permissive father. The findings related to permissive male caretaking do not conform to prior research and were completely unexpected. It is possible that potential reasons for these relationships can be teased out of the data by examining the differences in institutional setting and sex more closely. The following chapters will explore these differences.

CHAPTER V

ANALYSIS AND RESULTS – MULTIPLE REGRESSION COMPARISONS

The purpose of this chapter is to continue the discussion of the results of the multiple regression analyses. The previous chapter ended with an examination of the regression models for the entire sample. This chapter furthers that discussion with a comparison of the university student sample and the county jail inmate sample. Additionally, the effect that parenting styles have on females is compared to the effect that parenting styles have on males. A review of the hypotheses that guided this study concludes this chapter.

Model Two

Effect of Parenting Style on Deviant, Delinquent, and Criminal Behavior – University Students and County Jail Inmates

The next set of models examines the influence that the independent variables parenting style, race, and sex have on the dependent variable scales in the sample of university students. The university students are examined separately from county jail inmates in an effort to allow the researcher the ability to determine if parenting style affects behavior differently between the two groups. Significant results from both samples are discussed and presented below.

Predatory property crimes – university students. The first university student model examines the commission of a series of predatory property crimes (Table 47). The R-square value for this model is .091, which means that 9.1% of the variance in predatory property crimes committed by the students can be explained by the independent variables. A significant F-score, 2.875 (Sig. = .002), also suggests that there is at least one significant independent variable. In this instance, there is one significant independent variable – sex. The results of this model suggest that male students are more likely than female students to engage in property crimes.

Table 47: *University Students – Predatory Property*

	B (SE)	Beta
Constant	2.427 (1.414)	-
Sex	.816 (.211)	.220**
R-Square = .091		
F = 2.875		
SE = 1.553		

**$p \leq .01$

The results from the university student sample are similar to results from the full sample. In both the full sample and the university student sample, sex of the respondent was a significant predictor of property offending/non-offending. As the analysis continues, it will be interesting to see if a similar pattern of support emerges for all dependent variable scales.

Predatory person crimes – university students. The R-square value for this model was .085, which means that 8.5% of the variance in predatory person crimes committed by university students can be explained by the independent variables (Table 48). One independent variable in this model was significant: sex. Results suggest that male students are more likely than female students to commit person-based crimes.

Table 48: *University Students – Predatory Person*

	B (SE)	Beta
Constant	.330 (.917)	-
Sex	.438 (.137)	.183*
R-Square = .085		
F = 2.661		
SE = 1.007		

*$p \leq .05$

Illegal services crimes – university students. Amongst university students, the R-square for the illegal services model is .053 (Table 49). This means that 5.3% of the variance in the dependent variable is explained by the independent variables. This is an extremely low R-square

value and leaves 94.7% of the variance in illegal services crimes committed by university students unexplained. Additionally, the F-score is small and not significant, 1.589 (Sig. = .109), which suggests that no independent variable should be significant. However, one independent variable, sex, is a significant predictor of illegal service crimes. Consistent with the previous two models, male university students are significantly more likely than female university students to engage in illegal service activities. It must be reiterated, however, that given the low R-square value this model is not a good predictor of illegal service activities amongst college students.

Table 49: *University Students – Illegal Services*

	B (SE)	Beta
Constant	-.604 (.648)	-
Sex	.302 (.097)	.181**
R-Square = .053		
F = 1.589		
SE = .711		

**$p \leq .01$

Public disorder offenses – university students. The R-square in this model was .118, thus suggesting that the independent variables of parenting style, race, and sex explained 11.8% of the variance in the dependent variable. In addition, the F-score was significant, 3.827 (Sig. < .0001), which means that at least one independent variable should be significant. As seen in Table 50, two independent variables are significant: paternal permissive and sex.

Table 50: *University Students – Public Disorder*

	B (SE)	Beta
Constant	.450 (1.158)	-
Paternal Permissive	.065 (.029)	.180*
Sex	.756 (.173)	.245**
R-Square = .118		
F = 3.827		
SE = 1.272		

**$p \leq .01$; *$p \leq .05$

According to the results, university students are more likely to engage in public disorder activities when they are not parented by a permissive paternal caretaker. This finding complements earlier findings for the entire sample both in significance and direction. The second independent variable that is significant is sex. Again, being a male university student is a significant predictor of commission of public disorder offenses.

Deviant behaviors – university students. The R-square value in this model is low at .046. This suggests that the independent variables account for a paltry 4.6% of the variance in deviant behaviors exhibited by university students, which means that 95.4% of the variance is unexplained. Additionally, the F-score is low and not significant, 1.369 (Sig. = .194). Consistent with having an F-score that is not significant no independent variables in this model were significant. Despite the low R-square value, this model is interesting because it is the first university student model in which the sex of the respondent is not a significant predictor of behavior.

Alcohol/drugs – university students. This model had an R-square of .043, which suggested that the independent variables explained 4.3% of the variance in students' drug and alcohol use. The F-score for this model was small and not significant, .906 (Sig. = .529), suggesting that no independent variables would significantly predict alcohol and drug use; none were significant.

Subscale: Alcohol/soft drugs – university students. The R-square value of the alcohol and soft drug use subscale is .045 (Table 51), which is similar to the overall drug use scale for university students. This means that the independent variables account for 4.5% of the variance in alcohol, tobacco, and marijuana use amongst university students. The F value for this model is

.956 (Sig. = .483). Given the significance level of the F-score it is surprising that one of the independent variables were significant predictors of students' alcohol and soft drug use.

Table 51: *University Students – Alcohol/Soft Drug Use*

	B (SE)	Beta
Constant	1.115 (1.236)	-
Paternal Permissive	.066 (.029)	.234*
R-Square = .045		
F = .956		
SE = 1.103		

*$p \leq .05$

Students with permissive paternal caretakers are significantly less likely to use alcohol and soft drugs than students who do have some other type of paternal caretakers. Additionally, this is the second substance use model in which sex is not a significant predictor, which suggests that tobacco, alcohol, and marijuana use patterns on college campuses cannot be explained the sex of the student.

Subscale: Hard drugs – university students. The final university student model, hard drug use, had an R-square value of .032. This suggests that only 3.2% of the variance in students' hard drug use can be explained by the independent variables. As with previous models, an R-square value of .032 is extremely low and suggests that the model is a poor predictor of the behavior under investigation. Additionally, the F-score is low and not significant, .938 (Sig. = .499), thus no independent variables are significant. Despite this, results suggest that university student drug use is predicated largely upon factors other than parents' parenting style, sex, and race. The eight models that follow examine the effect that parenting styles had on the sample of county jail inmates.

Predatory property crimes – county jail inmates. The R-square value for this model was .126 (Table 52). This suggests that the independent variables defined for the study account

for 12.6% of the variance in property crimes committed by county jail inmates in the sample. The F value for this model is not significant with a score of 1.441 (Sig. = .173). Despite the lack of significance, which suggest that no independent variable should be significant, the sex of the inmate is predictive of property offending. Male inmates are significantly more likely than female inmates to commit predatory property offenses. It is interesting that no parenting variables are predictive of property offending amongst county jail inmates given the findings of past literature which suggests that those who exhibit problematic behaviors are likely to have had neglecting/rejecting parents.

Table 52: *County Inmates – Predatory Property*

	B (SE)	Beta
Constant	5.883 (3.219)	-
Sex	1.617 (.532)	.292**
R-Square = .126		
F = 1.441		
SE = 2.557		

**$p \leq .01$

Predatory person crimes – county jail inmates. This model has an R-square value of .132 (Table 53). That means that over 13% of the variance in the dependent variable, predatory person crimes committed by county jail inmates, can be explained by the independent variables. The F value is 1.518 (Sig. = .144) and is not significant. Despite this, one independent variable is significant. Non-white county jail inmates are significantly more likely to commit these types of crimes.

Table 53: *County Inmates – Predatory Person*

	B (SE)	Beta
Constant	3.472 (2.171)	-
Race	-.789 (.386)	-.211*
R-Square = .132		

F = 1.518
SE = 1.724

*$p \leq .05$

Illegal services crimes – county jail inmates. The model for illegal service crimes committed by county jail inmates had an R-square value of .130, thus 13% of the variance in offending can be explained by the independent variables. Despite this, the F value is not significant, 1.499 (Sig. = .151) and no independent variables are significant predictors of this type of behavior. Given the results for the past two models, it can be assumed that something other than parenting style and sex of the offender drives inmates to commit certain offenses.

Public disorder offenses – county jail inmates. The R-square value for this model was .170 (Table 54). This suggests that the independent variables explain 17% of the variance in public disorder offenses within the county jail inmate sample. This is a relatively strong R-square value in social science research. Additionally, the F value is 2.052 (Sig. = .036), which means that at least one independent variable should be significant. Male county jail inmates are significantly more likely than female county jail inmates to partake in public disorder offenses. The finding that males are more likely to engage in deviant or criminal acts is neither surprising nor unexpected.

Table 54: *County Inmates – Public Disorder*

	B (SE)	Beta
Constant	2.958 (2.287)	-
Sex	1.098 (.378)	.272**
R-Square = .170		
F = 2.052		
SE = 1.816		

**$p \leq .01$

Deviant behaviors – county jail inmates. With an R-square value of .072, the independent variables explain 7.2% of the variance when county jail inmates engage in deviant

behaviors. This is a very small R-square value as 92.8% of the variance is explained by other variables. The F value also is very small and non-significant, .774 (Sig. = .654) and, once again, no independent variables were predictive of behavior. As a whole, these models are poor predictors of the commission of crime and deviant behaviors by this sample of county jail inmates.

Alcohol/drugs – county jail inmates. The R-square value for this model was .262 (Table 55), which suggests that 26.2% of the variance in alcohol and drug use by county jail inmates can be explained by the independent variables. Additionally, the F value was significant, 2.409 (Sig. = .016), thus leading one to believe that at least one independent variable should be significant. In this model, one independent variable was significant: race. Race is predictive of substance abuse. White inmates are significantly more likely than non-white inmates to engage in drug and alcohol use. The models that immediately follow will discuss the two substance use subscales relative to the county inmate sample.

Table 55: *County Inmates – Alcohol/Drug Use*

	B (SE)	Beta
Constant	.918 (3.678)	-
Race	3.076 (.778)	.494**
R-Square = .262 F = 2.409 SE = 2.684		

**$p \leq .01$

Subscale: Alcohol/soft drugs – county jail inmates. With an R-square value of .204 (Table 56), over 20% of the variance in county jail inmates use of alcohol, marijuana, and tobacco is explained by the independent variables. With an F value that barely approaches significance, 1.739 (Sig. = .090), two independent variables are significant in this model.

Table 56: *County Inmates – Alcohol/Soft Drug Use*

	B (SE)	Beta
Constant	1.920 (.874)	-
Maternal Authoritative	.063 (.029)	.451*
Race	.604 (.185)	.424**
R-Square = .204		
F = 1.739		
SE = .638		

**$p \leq .01$; *$p \leq .05$

County jail inmates were significantly likely to use alcohol, marijuana, and tobacco if they were parented by women who were not authoritative. This finding complies with prior research, which suggests that the presence of an authoritative parent should reduce problem behaviors; surprisingly, this is the first instance of authoritative parenting being a significant predictor of behavior. Additionally, race is a significant predictor of alcohol and soft drug use. Once again, white inmates are significantly more likely than non-white inmates to partake in alcohol and other soft drugs.

Subscale: Hard drugs – county jail inmates. The R-square value for this model was .161 (Table 57). This suggests that the independent variables being used in the study explain 16.1% of the variance in hard drug use by county jail inmates. The F value is 1.921 (Sig. = .051) and it is significant, which means that at least one independent variable is significant. Consistent with findings from the model that examined all drug and alcohol use amongst county jail inmates, the independent variable race was significant and in the same direction in this model.

Table 57: *County Inmates – Hard Drug Use*

	B (SE)	Beta
Constant	-1.173 (3.002)	-
Race	1.660 (.534)	.316**
R-Square = .161		
F = 1.921		

SE = 2.384

**$p \leq .01$

Summary. First, it must be pointed out that the R-square values for these 16 models are not overwhelmingly strong. Overall, the county jail inmate models show more prediction strength than the models for the university students. When looking specifically at each of the samples, it is evident that sex is a stronger predictor of behavior amongst university students than county jail inmates as sex is significant in four of the student models compared to just two of the inmate models, with an overlap in two models (predatory property crimes and public disorder offenses).

Parenting variables do not prove to be very strong predictors in either of the two samples. One paternal variable (permissive) is a significant predictor of behavior in the university student sample. This result was surprising for two reasons. First, it was anticipated that authoritative parenting, from either caretaker, would have a greater effect on reducing the likelihood that university students would involve themselves in deviance and criminality. Second, it was expected that the neglecting/rejecting parenting style would be responsible for more problematic behaviors. Perhaps the neglecting/rejecting style of parenting did not have as great of an effect as anticipated because the frequency of offending amongst university students was not that high and this type of parenting style was the least reported amongst university students. But, that reason cannot be applied to county jail inmates because their frequency of offending was much higher than the university students and only one parenting variable was a significant predictor of the inmates' behavior. Not surprisingly, maternal authoritativeness (alcohol/soft drug use) predicted decreased levels of offending. Possible reasons for these similarities will be examined in the discussion chapter.

Model Three: Effect of Parenting Style on Deviant, Delinquent, and Criminal Behavior – Females and Males

This section details the effects of parenting style and race on deviant, delinquent, and criminal behavior. Results of the regression analyses are separated by the sex of the respondents. The first part of the section will discuss the independent variables that significantly affect the behavior of females and the second part of the section will examine how the independent variables significantly affect the behaviors of the male respondents. All significant results are discussed below.

Predatory property crimes – females. This model had an R-square score of .102 (Table 58), which suggests that the independent variables account for over 10% of the variance in the female respondents' likelihood to commit property crimes. One independent variable is significant, which, given the significance of the F value, 2.950 (Sig. = .002), was somewhat expected.

Table 58: *Female – Predatory Property*

	B (SE)	Beta
Constant	3.554 (1.751)	-
Maternal Neglect/Reject	-.102 (.045)	-.232*
R-Square = .102		
F = 2.950		
SE = 1.801		

*$p \leq .05$

The independent variable that reached levels of significance was maternal neglecting/rejecting. Female respondents were significantly less likely to engage in property offenses when they were not parented by a neglecting/rejecting mother. As has been the case throughout this research, the presence of neglecting/rejecting caretakers appears to increase problem behaviors. This complies with findings from prior research.

Predatory person crimes – females. This regression model had a low R-square score of .091 (Table 59). Therefore, approximately 9.1% of the variance in predatory person crimes committed by females can be explained by the independent variables. Additionally, the F score is significant, 2.597 (Sig. = .007), which suggests that at least one independent variable will be significant. In this instance, race is a significant predictor of person-based crimes. Simply, non-white females are significantly more likely than white females to commit these types of crimes.

Table 59: *Female – Predatory Person*

	B (SE)	Beta
Constant	1.637 (1.197)	-
Race	-.818 (.231)	-.227**
R-Square = .091		
F = 2.597		
SE = 1.232		

**$p \leq .01$

Illegal services crimes – females. The model analyzing illegal service crimes committed by female respondents had an R-square score of .095 (Table 60). Thus, fewer than 10% of illegal service activity by females can be explained by the independent variables in the model. One independent variable, race, is a significant predictor of illegal service activities. Non-white female respondents are significantly more likely to engage in illegal service crimes.

Table 60: *Female – Illegal Services*

	B (SE)	Beta
Constant	1.671 (1.072)	-
Race	-.582 (.207)	-.180**
R-Square = .095		
F = 2.716		
SE = 1.103		

**$p \leq .01$

Public disorder offenses – females. The R-square value for this model was .119 (Table 61), which suggests that the independent variables explain nearly 12% of the variance in the commission of public disorder offenses committed by females. In addition, the F score is significant, 3.502 (Sig. ≤ .0001), thus indicating that at least one independent variable in the model is significant. There are two significant independent variables in this model: race and paternal permissiveness.

Table 61: *Female – Public Disorder*

	B (SE)	Beta
Constant	2.069 (1.393)	-
Paternal Permissive	.081 (.036)	.210*
Race	-.935 (.269)	-.219**
R-Square = .119		
F = 3.502		
SE = 1.434		

**$p \leq .01$; *$p \leq .05$

As seen in the table above, non-white female respondents are significantly more likely than their white counterparts to engage in public disorder offenses. Consistent with earlier findings in this study, the type of father one has plays a role in the child's behavior. In this instance, female respondents were significantly more likely to engage in these types of offenses if they were raised by a father who was not permissive.

Deviant behaviors – females. With an R-square score of .056 (Table 62), the independent variables in this model explain just over 5% of the variance in the commission of deviant behaviors by females in this study. Despite the fact that the F value is not significant, 1.551 (Sig. = .131), one independent variable is significant. Once again, non-white female respondents are significantly more likely than white female respondents to take part in deviant

behaviors. This variable in particular has been significant throughout this model; implications will be examined in the discussion chapter.

Table 62: *Female – Deviant Behavior*

	B (SE)	Beta
Constant	2.875 (1.358)	-
Race	-.792 (.262)	-.197**
R-Square = .056		
F = 1.551		
SE = 1.397		

**$p \leq .01$

Alcohol/drugs – females. The R-square score for this model is .055. This means that only 5.5% of the variance in substance use by females can be explained by the independent variables in the model. The F score does not come close to approaching significance, 1.108 (Sig. = .360), and no independent variables are significant. This represents a weak model for predicting alcohol and drug use by females.

Subscale: Alcohol/soft drugs – females. With an R-square value of .063, the independent variables in this study account for approximately 6% of the variance in alcohol, tobacco, and marijuana use by females. The F value of .1.278 (Sig. = .252) is not significant. Again, no independent variables achieve significance in this model.

Subscale: Hard drugs – females. The variance in hard drug use by females that is explained by the independent variables in this model is a paltry 2.7% (R-square = .027). This suggests that the model does not adequately measure hard drug use. No independent variables reach a level of significance, consistent with the presence of an F score that is not significant, .731 (Sig. = .681). Surprisingly, female drug and alcohol use cannot be explained by the independent variables in this study. The eight models that follow examine the effect that parenting styles had on males in this sample.

Predatory property crimes – males. The R-square value in this model was .185 (Table 63), thus suggesting that the independent variables explain 18.5% of the variance in males' property crimes. In addition, the F score is significant, 3.536 (Sig. = .001). Consistent with the significant F score, there is one significant independent variable: paternal neglecting/rejecting. Male respondents were significantly less likely to commit property crimes if they were not parented by a neglecting/rejecting male caretaker. This finding is consistent with prior research.

Table 63: *Male – Predatory Property*

	B (SE)	Beta
Constant	8.342 (3.344)	-
Paternal Neglect/Reject	-.168 (.084)	-.218*
R-Square = .185		
F = 3.536		
SE = 2.883		

*$p \leq .05$

Predatory person crimes – males. In this model, the independent variables explain 21.3% of the variance in person-based crimes committed by males (R-square: .213; Table 64). As expected given the significant F score (4.203; Sig. ≤ .0001), two independent variables reached levels of significance.

Table 64: *Male – Predatory Person*

	B (SE)	Beta
Constant	2.406 (2.066)	-
Paternal Permissive	.114 (.056)	.206*
Race	-1.063 (.366)	-.232**
R-Square = .213		
F = 4.203		
SE = 1.781		

**$p \leq .01$; *$p \leq .05$

Once again, the race variable is significant with non-white males being more likely than white males to commit crimes against people. Additionally, a male without a permissive father is

significantly more likely to commit a predatory crime against another person than those raised by some other type of male caretaker. Given the findings in this study, it appears that the permissive parenting style has an impact on behavior that was not anticipated by looking at previous research. Simply, results suggest that permissive fathering is indicative of a lower likelihood of offending. A more in-depth discussion of this finding will occur in the next chapter.

Illegal services crimes – males. The independent variables for parenting style and race explain approximately 21% of the variance in illegal service crimes committed by males (R-square: .214; Table 65). Given the F score (4.245; Sig. ≤ .0001), it is not surprising that there is one significant independent variable. Yet again, race is a significant predictor of offending in this sample; non-white males are significantly more likely than white males to commit illegal service crimes. The R-square score suggests that this is an adequate model to use when predicting the effects of parenting style and race on minor criminal offending by males.

Table 65: *Male – Illegal Services*

	B (SE)	Beta
Constant	2.764 (1.806)	-
Race	-.924 (.320)	-.230**
R-Square = .214		
F = 4.245		
SE = 1.557		

**$p \leq .01$

Public disorder offenses – males. Based on an R-square score of .220, one would expect this model to be adequate to use when predicting the effects of parenting style and race on the commission of public disorder offenses by males because 22% of the variance in public disorder offenses can be explained by the independent variables. However, none of the independent variables were significant predictors of public disorder offending.

Deviant behaviors – males. Once again, this is a fairly strong model to use in order to predict offending because the R-square score is .204 (Table 66). This suggests that the independent variables in the model account for 20.4% of the variance in deviant behaviors exhibited by males. Two independent variables are significant predictors of deviant offending. The likelihood of engaging in deviant behaviors is significantly reduced when a male is not parented by an authoritarian male caretaker. This suggests that the presence of "drill sergeant-type" paternal caretaker does not dissuade males from running away from home, skipping class, cheating in school, or engaging in other forms of deviant behavior. At the same time, the likelihood of engaging in deviant activity significantly increases if one is not parented by a permissive female caretaker. This complements findings pertaining to permissive male caretakers that are discussed above.

Table 66: *Male – Deviant Behavior*

	B (SE)	Beta
Constant	2.912 (1.884)	-
Maternal Permissive	.124 (.052)	.243*
Paternal Authoritarian	-.108 (.053)	-.195*
R-Square = .204		
F = 3.978		
SE = 1.624		

*$p \leq .05$

Alcohol/drugs – males. The R-square value for this model (.167) is smaller than previous R-square scores in this section. Surprisingly, with an F value that is significant, 2.288 (Sig. = .022), there are no significant independent variables.

Subscale: Alcohol/soft drugs – males. The R-square for this model is .138 (Table 67), which suggests that nearly 14% of the variance in alcohol, marijuana, and tobacco use by males can be accounted for by the independent variables. Only one independent variable is significant:

permissive parenting by paternal caretakers. In this model, the likelihood that the male respondent will use alcohol, marijuana, or tobacco significantly increases if he does not have a permissive father figure. Again, this finding is not consistent with prior research, but it is consistent with many findings in the current study.

Table 67: *Male – Alcohol/Soft Drug Use*

	B (SE)	Beta
Constant	1.564 (1.441)	-
Paternal Permissive	.099 (.038)	.323**
R-Square = .138		
F = 1.847		
SE = 1.117		

**$p \leq .01$

Subscale: Hard drugs – males. The R-square value for the final model was .158 (Table 68), which suggests that 15.8% of variance in hardcore drug use by males can be explained by the independent variables. Three of the independent variables, in particular, are significant.

Table 68: *Male – Hard Drug Use*

	B (SE)	Beta
Constant	1.700 (2.765)	-
Maternal Authoritative	-.166 (.078)	-.249*
Maternal Neglect/Reject	-.166 (.072)	-.267*
Paternal Authoritative	.151 (.075)	.234*
R-Square = .158		
F = 2.927		
SE = 2.383		

*$p \leq .05$

Male respondents are significantly less likely to use hard drugs when they are not parented by a neglecting/rejecting female caretaker. In an interesting twist, male respondents also are significantly less likely to use hard drugs when they are not parented by an authoritative mother figure, while results suggest that male respondents are significantly more likely to use

hard drugs if they are not parented by an authoritative male caretaker. This finding suggests that there may be an inherent difference in a child's reaction to the use of similar parenting styles by a male and female parent. A positive reaction to one type of parenting style used by the paternal caretaker and a negative reaction to the same type of style used by the maternal figure is essentially unheard of in the literature. Reasons and implications will be discussed shortly.

Summary. In concluding this section, one can easily describe the female and male models as contrasting. Most R-square scores in the female models were small, with the largest having a value of .119 (public disorder offense). On the other hand, the R-square values in the male models were adequate, with the smallest having a value of .138 (alcohol/soft drugs). This suggests that the combination of race and parenting style may be a better predictor of deviance and criminality in men than women (three female models and two male models contained zero significant independent variables).

Upon closer examination, parenting variables reached levels of significance on eight occasions in the eight male behavioral models. In the female models, parenting variables only reached significant levels two times. Permissive parenting appears to be the strongest predictor of good behavior as it was significant in three male models (one maternal; two paternal) and one female model. Additionally, the neglecting/rejecting parenting conformed to prior research and continued to predict higher levels of offending in three models (two male; one female). While neglecting/rejecting was predictive of increased offending, authoritative parenting produced enigmatic results. In one male model (hard drug use), an authoritative paternal caretaker predicted decreased drug use, whereas an authoritative maternal caretaker predicted increased hard drug use by males. The authoritative style of parenting did not achieve significance with

females in this sample. These differences will be examined in more detail in the discussion chapter.

Research Hypotheses

Hypothesis 1: Reported Parenting Styles

The first hypothesis stated that the authoritative style of parenting would be the most reported style of parenting across responses for both maternal caretakers and paternal caretakers. As discussed above (Table 16), the mean scores for each of the parenting scales reveal that respondents were most likely to be parented by authoritative caretakers; thus, the first hypothesis was supported. Using a 5-point Likert scale, participants were asked to indicate their level of agreement with a series of statements ("1" = "Strongly Agree;" "5" = "Strongly Disagree). The mean score for the maternal authoritative scale was 11.58; thus over the five items in the authoritative maternal scale the average suggests that many participants agreed (or strongly agreed) that their maternal caretakers was authoritative. Additionally, the mean score for the paternal authoritative scale was 12.98, which suggests that many participants agreed that their paternal caretaker was authoritative. On the other hand, respondents were least likely to be parented by neglecting/rejecting caretakers. The mean score for the maternal neglecting/rejecting scale was 20.01, suggesting that many respondents disagreed with statements that portrayed their maternal caretaker as neglecting rejecting. Similarly, the mean score for the paternal neglecting/rejecting scale was 18.66, which was the highest average score for all paternal scales and suggests that many participants disagreed with the notion that their paternal caretaker was neglecting/rejecting.

When comparing reported parenting styles of university students to county jail inmates, the university students were significantly more likely than county jail inmates to report having

authoritative and permissive parents (both maternal and paternal) and county jail inmates were significantly more likely than university students to report having authoritarian and neglecting/rejecting parents (both maternal and paternal). Additionally, the maternal parenting scale with the lowest mean score in the student sample was the authoritative scale; the paternal scale with the lowest mean also was the authoritative scale. Amongst the county jail inmates, the maternal parenting scale with the lowest mean was the authoritarian scale; the authoritarian scale also had the lowest mean score of all paternal scales within the sample of county jail inmates. A discussion of the implications of these differences is provided in the next chapter.

Hypothesis 2: Effects of Parenting on the Entire Sample

The second hypothesis stated that the authoritative parenting style would significantly predict lower levels of deviance, delinquency, and crime amongst the entire sample. Additionally, the hypothesis stated that the neglecting/rejecting parenting style would significantly predict higher levels of deviant, delinquent, and criminal offender amongst the entire sample. This hypothesis was supported to a certain extent by the analysis.

Consistent with prior research, neglecting/rejecting parenting predicted an increased likelihood of offending in two of the dependent variable scales and both sub-scales. The presence of maternal neglecting/rejecting caretakers predicted higher levels of commission of property crimes, alcohol/drug use, and hard drug use. The presence of a paternal neglecting/rejecting caretaker predicted an increased use of alcohol, tobacco, and marijuana throughout the entire sample.

The parenting type that was most predictive of decreased offending was the permissive style. Paternal permissiveness was significantly predictive of lower levels of person-based crimes, as well as public disorder offenses and alcohol, tobacco, and marijuana use. It also

should be mentioned that the sex of the respondent was significantly predictive of all six dependent variable scales and both sub-scales; within this sample, males were more likely than females to take part in each type of deviance, delinquency, and crime. Additionally, non-whites were significantly more likely than whites to engage in property and person-based crimes, commit illegal service and public disorder offenses, and display deviant behaviors. Implications for these findings are discussed in the next chapter.

Hypothesis 3: Parenting Effects on University Students and County Jail Inmates

The third hypothesis stated that authoritative parenting would have the most significant effect on the behaviors of university students and that neglecting/rejecting parenting would have the most significant effect on the behaviors of county jail inmates. Results of the multiple regression analyses conducted on the sample of university students suggest that authoritative parenting had no significant impact on that group. After examining the effects that parenting style had on the university student's engagement in behaviors included in the six dependent variable scales and both subscales, it is noticeable that authoritative parenting is not significantly predictive of involvement, or non-involvement, in these behaviors. This is a surprising finding given the wealth of research which has suggested that authoritative parenting is the best predictor of reduced involvement in deviant, delinquent, and criminal behavior. The neglecting/rejecting hypothesis was not a significant predictor of county jail inmate involvement in any of the deviant, delinquent, or criminal behaviors. Based on these results, however, as well as those for the university students, there is mixed support for the third hypothesis and a number of interesting findings that are discussed in the following chapter.

Hypothesis 4: Parenting Effects on Females and Males

The fourth hypothesis stated that female and male participants would experience similar outcomes when parented with similar parenting styles. For example, participants from both genders would be less likely to engage in deviant, delinquent, and criminal activities if parented by an authoritative caretaker. Additionally, those parented by a neglecting/rejecting caretaker would be more likely to engage in deviance, delinquency, and crime. Again, results were mixed and there was limited support for this hypothesis.

The two parenting types that produced similar behaviors across both males and females were neglecting/rejecting and permissive parenting. Amongst the female sample, the neglecting/rejecting parenting type predicted an increased likelihood of committing predatory property crimes. In comparison, results from the male sample suggest that the presence of a neglecting/rejecting paternal caretaker increased respondents' engagement in property crimes, as well as hard drug (no parenting types predicted female drug use).

Permissive paternal parenting also had similar effects across the female and male subsamples, although the effects were not felt on the same types of offenses. This type of parenting was predictive of decreased involvement in crimes against people, deviance, and alcohol/soft drug use by males. Permissiveness also predicted decreased involvement in public disorder offenses by female respondents. There were no other similarities between females and males, thus the conclusion that limited support was achieved for this hypothesis.

Hypothesis 5: Parenting Effects on Whites and Non-Whites

The fifth hypothesis stated that whites and non-whites would experience similar outcomes when parented with similar parenting styles with the exception of the authoritarian parenting style. Based on prior research findings, it was hypothesized that non-white participants

would be less likely than white participants to engage in deviant, delinquent, and criminal behaviors when parented by an authoritarian caretaker. Unfortunately, the sample did not contain enough racial variance, thus the researcher was not able to directly examine this hypothesis. However, race is still an important variable in these analyses, as evidenced by its significance in a number of the models discussed above.

Summary

The results from the analysis provide a number of interesting, as well as unexpected, findings. In terms of scale development, the results maintain support for the neglecting/rejecting scale. Thus, the addition to Buri's (1991) Parental Authority Questionnaire has been reliable and valid as a ten-question scale and as a five-question scale. This development should aid in future studies of the effectiveness of certain parenting styles.

Results from the multiple regression analysis were a bit more unexpected, however. For example, the presence of a permissive caretaker significantly reduced the likelihood that a member of the sample engaged in: crimes against people, public disorder offenses, and soft drugs. The presence of a permissive caretaker also reduced the likelihood of public disorder offenses amongst students and females, soft drug use by students and males, and person-based crimes and deviant behavior by males. Prior research (Palmer & Hollin, 2001; Querido et al., 2002; Schroeder et al., 2010; Vieno et al., 2009) suggests that children with permissive parents should be more likely to engage in deviance, delinquency, and criminality. The effects of the permissive parenting style proved to be unexpected throughout the entire study. Reasons and ramifications of this divergence from prior research are discussed below.

For the most part, however, the results were expected. Neglecting/rejecting parenting was predictive of increased participation in crime and deviance. Authoritative parenting, in the few

times that it was significant, was predictive of decreased participation in criminal and deviant activity. A discussion of all of these findings and their implications, as well as directions for future research, is presented in the next chapter.

CHAPTER VI

DISCUSSION AND CONCLUSION

Over time, a number of criminologists have attempted to theorize the effects that parenting has had on delinquent and criminal behavior. As discussed in earlier chapters, leading theorists such as Hirschi (1969), Gottfredson and Hirschi (1990), and Moffitt (1993) have all explored different aspects of the link (both direct and indirect) between the behaviors of parents and the resultant behaviors of their children. For example, Hirschi (1969) suggested that the parent-child bond influenced the child's level of delinquency and criminality later in life. Later, Gottfredson and Hirschi (1990) theorized that low self-control in children is, in part, the result of poor parental management techniques. Together, these two theories suggest that the level of discipline exhibited by parents toward their children and the nature of the bond between parent and child have long-term effects on the behavior – either delinquent and criminal or non-delinquent and non-criminal – of the child. The focus of the current research project, however, was on Baumrind's (1967, 1971, 1972) singular typology that focused on both of these aspects of parenting (demandingness and responsiveness).

According to Baumrind's typology, a blend of both demandingness and responsiveness is critical for successful parenting. A demanding parent is one who uses firm, yet non-coercive, control, provides effective monitoring and supervision, and applies consistent patterns of discipline for wrong-doing and praise for good behaviors (Baumrind, 1996). A responsive parent is one who expresses love, warmth, and has open communication and dialogue with their child (Baumrind, 1996). As detailed previously, these two concepts have been used to formulate Baumrind's typology of parenting styles, which includes: authoritarian, authoritative, neglecting/rejecting, and permissive.

Limited prior research has focused on the link between Baumrind's parenting styles and childhood behaviors. As discussed in Chapter Two, most of these research studies have focused on three (authoritarian, authoritative, and permissive) of the four parenting types, while disregarding the importance of the neglecting/rejecting type. Results from these studies suggest that children with authoritative parents are the least likely to engage in deviant, delinquent, or criminal acts (see Appendices A, B, C, and D). The few studies that focused on the neglecting/rejecting parenting style all suggested that children exposed to that type of parenting were likely to engage in acts of deviance, delinquency, and criminality (Avenevoli et al., 1999; Baumrind, 1991; Chassin et al., 2005; Lamborn et al., 1991; Patock-Peckham & Morgan-Lopez, 2007; Steinberg et al., 1994, 2006). Additionally, studies focusing solely on authoritarian, authoritative, and permissive parenting found that the authoritarian and permissive styles of parenting were positively related to deviant, delinquent, and criminal behavior (Palmer & Hollin, 2001; Querido et al., 2002; Schroeder et al., 2010; Vieno et al., 2009). One last study reported that children of authoritarian and permissive parents were less likely than children of neglecting/rejecting parents to use tobacco (Chassin et al., 2005). Given these research findings, the results of the current analyses are somewhat surprising, yet intriguing. This chapter provides a discussion of: the research findings (related to parenting styles as well as scale development), the implications that this research has for families and policy-makers, the strengths and limitations of the research, and directions for future research.

Discussion of Research Findings

The results from the current study suggest a number of things. First, they suggest that the extended Parental Authority Questionnaire is a reliable and adequate measure of Baumrind's typology of parenting styles. The findings also suggest that the permissive and

neglecting/rejecting parenting styles had the most impact on the delinquent and criminal behavior of the respondents who comprise this sample and further, that the authoritative parenting style had very little impact. Aside from parenting style, the results also suggest that race and gender were significant predictors of behavior. The implications of these findings are discussed below.

Extended Measurement Instrument

As discussed, Buri's (1991) Parental Authority Questionnaire (PAQ) has effectively measured Baumrind's typology since its introduction into the literature two decades ago. To reiterate, the PAQ contains 60 items and asks respondents to report their level of agreement or disagreement with those items. Thirty of the 60 items measure maternal styles of parenting and the remaining 30 items measure paternal styles of parenting. Per each parent, ten of the items describe the authoritarian style, ten describe the authoritative style, and ten describe the permissive style. Given the fact that Baumrind's typology defines four types of parenting, it was important to devise a measurement instrument that captured each parenting style.

A neglecting/rejecting scale was created to measure maternal parenting and paternal parenting. After conducting a pre-test and analyzing the results, the internal consistency score for the maternal neglecting/rejecting scale was .86 and the paternal neglecting/rejecting score was .90. According to DeVellis (2003), each of these scales was considered very good. Due to problems with the response rate of the pre-test and informal feedback from some respondents about the length of the pre-test, the decision was made to shorten the PAQ from 80 items (40 items per parent) to 40 items (20 items per parent). A split-half reliability analysis was performed in order to determine which five items from each scale provided the best reliability score; the process that was used is discussed in Chapter Three.

As discussed in Chapter Four, the internal consistency scores for the PAQ measures in the current study compare favorably with the internal consistency scores generated during the pre-test. Given the fact that the scales remained "respectable" and "very good" it is important that researchers consider using these extended measures when researching Baumrind's typology for the simple reason that consistent scales need to be used when measuring these concepts; one of the limitations of prior literature is the fact that measures used to gauge parenting styles are inconsistent. Granted, the measurement items created for this research project only have been used in two studies at this point, but they have already proven themselves to be reliable and valid measures of the neglecting/rejecting parenting style. It is important that they continue to be utilized, and tweaked as necessary (especially the new neglecting/rejecting scale), in future research.

Impact of Neglecting/Rejecting Parenting

One of the most expected results that was uncovered in the current study was the relationship that neglecting/rejecting parenting had with delinquency and criminality. To reiterate, across the entire sample, maternal neglecting/rejecting was significantly related to an increased likelihood of property crime and alcohol/drug use, especially hard drug use. Across the same sample, paternal neglecting/rejecting also was significantly related to an increased likelihood of alcohol, tobacco, and marijuana use. These results support previous results discussed earlier in this chapter.

Based on the conceptualization of demandingness and responsiveness provided by Baumrind (1996), Maccoby and Martin (1983), and Simons et al. (2004), it is argued that Buri's (1991) operationalization of Baumrind's typology and the operationalization of neglecting/rejecting parenting used in this study are just as appropriate as measurement

instruments used in the past. According to Baumrind (1996), neglecting/rejecting parents are neither warm nor confrontational, do not supervise, nor consistently discipline their children, and do not communicate expectations that they have for their children. Consequently, children raised by neglecting/rejecting parents are theorized to exhibit problematic behaviors. The neglecting/rejecting parental style is the polar opposite of the authoritative type. The neglecting/rejecting scale developed and used in this study is conceptually sound in the way in which it is correlated with the other parenting types, and as reported it is also statistically sound. As expected, the neglecting/rejecting style was the least reported parenting type by the respondents in this sample, but it had a very significant impact on the results.

Impact of Permissive Parenting

Permissive parenting achieved statistical significance the most frequently in the analyses. Throughout the analyses (entire sample, university students, county jail inmates, females, and males) there were 9 instances in which either maternal or paternal permissiveness was a significant predictor of reduced deviant, delinquent, or criminal behavior; the relationship and direction was not expected. As discussed in Chapter Five, a plethora of prior research has suggested that individuals raised by permissive parents are more likely to engage in delinquency and criminality. Earlier research has suggested that it is not in the best interests of either parent or child when the child-parent relationship is treated as a friendship by the parent. These earlier findings suggested that parents must set rules, guidelines, and expectations for their children and be consistent in disciplining the child.

However, results from the current study suggest that permissive parenting has a positive impact on behavior. These findings are interesting given the fact that county jail inmates in this sample were not significantly impacted by permissive parenting, while university students were

significantly impacted in regards to two types of crime. Perhaps this suggests that a shift has occurred in the way that youths respond to permissive parenting. As discussed, past research suggested that youths respond poorly to the lack of discipline displayed by permissive parents, but the results from the current study may point to shift in youths' responses to this type of parenting. Instead of reacting negatively due to a lack of discipline, it is possible that children are beginning to respond more positively to the attention bestowed upon them by their parents and the interactions that they have with their parents. More often than not, children (even college-aged children) rely on their parents for sustenance, shelter, and money. Current results suggest that individuals understand their reliance on their parents and may not want to do anything to disappoint or lose the support of their parents. Still, this is an extremely interesting and unexpected finding and one that future research must continue to probe.

Impact of Authoritative Parenting

Aside from the findings related to neglecting/rejecting parenting, the lack of significant findings relating to authoritative parenting is the most surprising result in the current study. A bevy of prior literature (see Appendices A, B, C, and D) has suggested that authoritative parenting is the most influential parenting type and that children raised by authoritative mothers and fathers are the least likely to engage in acts of deviance, delinquency, and crime. There are only two instances in the current study in which authoritative parenting significantly reduced the likelihood of respondents engaging in the behavior asked: alcohol/soft drug use by county jail inmates (authoritative female) and hard drug use by male respondents (authoritative male). More surprisingly, an authoritative mother was predictive of an increased likelihood that a male respondent would use hard drugs.

Again, the reason for these findings may be difficult to ascertain, but it appears one of the primary reasons is the measurement instrument used. The lone study discussed in Chapter Two to explicitly use Buri's PAQ was conducted by Patock-Peckham and Morgan-Lopez (2007). The authors analyzed patterns of alcohol use in a sample of 441 college students at Arizona State University. According to their results, maternal parenting styles were not significantly related to alcohol use, whereas the presence of an authoritative father helped decrease alcohol use for males and females (Patock-Peckham & Morgan-Lopez, 2007). There are some similarities between this study and the current study: university students are surveyed and maternal authoritativeness is not a significant predictor of student behavior in either study. Thus, there is some precedent that cautions researchers against expecting authoritative parenting to reduce problem behaviors.

It is wholly different, however, to expect authoritative parenting to lead to an increase in problem behaviors. But, when examining the true nature of authoritative parenting, perhaps one should not be so quick to assume that it will lead to the best outcomes. To reiterate from Chapter Two, the authoritative parent welcomes a verbal give and take with the child, solicits objections from the child, explains the reason for certain rules, and *encourages the child to be autonomous* (Baumrind, 1966, 1968, 1971). It is not farfetched to think that a child who has been raised in a nurturing environment in which warmth and reciprocity abound would be compelled to act upon the autonomy instilled within oneself (by the parent, no less) and experiment with alcohol and drugs. As discussed in this sample, males with authoritative mothers are the most likely to use hard drugs. This does not necessarily mean that authoritative mothers are bad or that male children are more likely to rebel against their authoritative mother; prior research has stated that the mere presence of an authoritative parent removes the child's desire to rebel (Simons &

Conger, 2007). Simply, it may mean that the male child's relationship with an authoritative mother is one that encourages discussion about drugs and alcohol, experimentation, consequences, and learning from those consequences. Based on the results, this potential chain of events is limited to substance use and does not lead to serious or violent crimes against people or property. Interestingly, the fact that paternal authoritativeness predicts a reduced likelihood of male respondents using the same types of alcohol and hard drugs may suggest that paternal discipline carries more clout than maternal discipline and that male children do not want to disobey their fathers.

Summary of the impact of parenting types. It appears a few things are clear based on the interesting findings discussed above. First, permissive parenting may have the best consequences for the child, especially those who participated in this study. Keep in mind, this does not mean the permissive parenting type is ideal. It simply implies that the respondents in this sample who reported being raised by permissive parents were not willing to let the lax discipline that they received from their parents negatively impact them. On the contrary, they were able to resist the pulls of minor deviance, delinquency, and crime despite the fact that they did not have parents who were willing to set rules or guidelines for behavior.

Second, children exposed to neglecting/rejecting parents were at as great of a risk as first thought. Essentially, neglecting/rejecting parents are unconcerned with discipline and communicating with their children. The failure to instill discipline, provide a solid foundation, and simply be there for the child is likely to lead alcohol and drug use, general deviance, minor delinquency and crime, as well as serious and violent criminal behavior. Parents need to be there for their children. Additionally, this is not to say that the individuals in this study did not have proper guidance from somebody, they simply indicated that they did not receive it from their

neglecting/rejecting parents. Future research should make a better effort to identify who, if anybody, provided guidance for children in these situations; it could have been provided by a teacher, a coach, a neighbor, or even a friend.

Finally, the authoritative type of parenting, when measured using the PAQ, may not be as idyllic as expected. Granted, there were a handful of instances when maternal authoritativeness predicted a reduced likelihood of alcohol and drug use. But, maternal authoritativeness predicted an increased likelihood of alcohol and drug use, especially in males, which was surprising. Recent research (Fearon, Bakermans-Kranenburg, van Ijzendoorn, Lapsley, & Roisman, 2010) suggests that a strong mother-son attachment reduces the likelihood that the child will exhibit behavioral problems. While attachment is not synonymous with parenting style, there are similarities between parent-child attachment and authoritative parenting that suggest a warm and loving relationship between the parent and the child. Perhaps future research should take an integrated approach and examine Baumrind's typology along with the attachment aspect of Hirschi's social bond theory. Furthermore, the current research suggested that authoritative parenting did not reduce the likelihood of committing criminal and delinquent acts, as it was expected to do. This may be a result of using the PAQ, it may be a result of the particular sample that was analyzed, or it may be indicative of the true nature of authoritative parenting. Continued research and further scrutiny of these ideas is absolutely necessary.

Impact of Race and Sex

Throughout much of the current research, sex was a significant predictor of behavior. When examining the entire sample of respondents, males were significantly more likely than females to engage in every type of crime and alcohol/drug use category. Given the disparity of male offenders to female offenders this was hardly surprising. But, when looking solely at the

county jail inmates, gender was predictive of only two crime categories – property crimes and public disorder. This suggests that the gender of the county jail inmates in this sample does not explain the majority of delinquent and criminal behaviors that they exhibited. On the other hand, males in the university sample are much more likely than females to commit any number of offenses, including property crimes, crimes against people, illegal services and public disorder offenses. Perhaps this simply means that the female university students who participated in this research are not likely to commit criminal or delinquent acts, although other explanations are possible and may be uncovered with continued research.

Given the somewhat similar effects that parenting style had on males and females in this sample, it also could mean that there is an inherent difference – other than parenting – between female and male university students that causes males to engage in criminogenic behaviors. One possible explanation may be the different ways that male students and female students cope with stress and anxiety. Recent research conducted amongst a college sample of 679 students found that male students were much more likely to utilize negative coping strategies, such as drug/alcohol use and criminal activity, to deal with stress brought upon by things such as text anxiety (Bowers, Bowen, Huck, Lee, & Spraitz, 2011). Overall, however, the idea that males are more likely than females to commit crime is neither new nor novel; the results simply support prior knowledge and research.

Accurately gauging the impact of race was much more difficult in the current study. Out of the 391 respondents who identified their race, only 70 were non-white (18.1%). Of the 70 non-white participants, 38 (54.3%) were county jail inmates and 32 (45.7%) were university students. Given such a small sample of non-white participants, any conclusions must be viewed carefully, if not skeptically. As reported in Chapter Four, white respondents reported

significantly fewer acts of deviance, delinquency, and criminality; being non-white was a significant predictor of an increased likelihood to engage in five criminal/delinquent behaviors (race was not a significant predictor of any type of drug or alcohol use). Again, there were more county jail inmates than university students in the non-white sample, thus it is possible that the results for the total sample may be skewed.

When examining the sample of university students, race was not predictive of deviance, delinquency, or criminal behavior. Non-white county jail inmates were more likely to engage in crimes against people. These findings from the sub-samples provide some support for the results from the total sample and from recent research. Ghazarian and Roche (2010) found that African American and Hispanic youth who had engaging mothers (essentially, a proxy for high responsiveness) were less likely to engage in delinquent behavior. In the current study, to reiterate, non-white respondents were significantly more likely than white respondents to have authoritarian mothers (low responsiveness). Thus, there is support for the notion that authoritarian mothering may not be beneficial for non-whites; meanwhile, the current study was not able to completely analyze the impact that authoritarian fathering has on non-whites.

White county jail inmates were more likely to use alcohol and all types of drugs. There may be a number of reasons why white inmates were more likely to engage in substance use. First, non-white offenders may be more likely to underreport drug use. A plethora of research has suggested that minority offenders underreport substance use relative to white offenders (Falck, Siegal, Forney, Wang, & Carlson, 1992; Fendrich & Xu 1994; Katz, Webb, Gartin, & Marshall, 1997; Kim, Fendrich, & Wislar, 2000; Rosay, Najaka, & Herz, 2007). But, additional research suggests that whites underreport more than non-whites (Lu, Taylor, & Riley, 2001;

McNagny & Parker, 1992). Based on the varied findings, one must keep in mind the self-report bias associated with drug use amongst samples of offenders.

Second, these results may be caused by the crossover effect. The crossover effect states that whites are more likely to use drugs and alcohol while younger than 35-years-old and minorities are more likely to use drugs and alcohol while older than 35-years-old (Watt, 2008). The average age of the county jail inmates in this sample was 33.16, thus it is possible that if the same sample of county jail inmates were surveyed two years from now the results may be different. Recent research supports the idea of a crossover effect by reporting that minority populations are less likely than white populations to use alcohol and drugs when under the age of 35 (French, Finkbiner, & Duhamel, 2002; Rote & Starks, 2010; Watt, 2004), while reporting that some minority groups have higher rates of substance use when over the age of 35 (French et al., 2002). The notion that minority offenders underreport rates of drug and alcohol usage, as well as the crossover effect, are important ideas that must be kept in mind when examining self-reported alcohol and drug use in the future.

Implications for Parents

Because this study focused on the effects that parenting had on behavior, this section will focus on the parenting implications associated with the findings. It is important to keep in mind, as Steinberg et al. (1994, p. 758) pointed out, that Baumrind's typology "is a theory about types, not about specific parenting practices." Thus, any recommendations for parents that are derived from the current analysis must go beyond addressing simple parenting behaviors. Instead, parents must seek to either reinforce or recreate the type of parenting style that they employ while raising their children.

The authoritative parenting type is discussed extensively in previous literature. Essentially, this is touted as the best parenting style and research supports that claim (see Appendices A, B, C, and D). But, the current research has uncovered potential shortcomings of authoritative maternal parenting relative to the use of drugs. Given the desire of authoritative parents to be seen as disciplinarians who provide guidance, feedback, and are open to discussion and debate, it is imperative of them to educate their children in the perils of substance abuse. It is understandable, and perhaps even acceptable in today's society, that adolescents and young adults will experiment with tobacco, alcohol, and marijuana (in addition to other types of drugs); experimentation allows for autonomous decision-making, which is a hallmark of the authoritative parenting type. But, those parents who preach discretion and autonomy also must be prepared to have honest discussions with their children about drugs and alcohol.

In addition to educating their children about substance abuse, the authoritative parent must be willing to scrutinize their children. It can be argued that increased scrutiny does not comply with the tenets of the authoritative parenting type. But, an authoritative parent is not just a sounding board and source of communication. Rather, an authoritative parent also relies on discipline, direction, positive expectations, and proper guidance in order to achieve goals. In order to properly guide, the authoritative parent must scrutinize. Simply, discretion and autonomy can be given to the child, but the parent must know when to limit the autonomy of their adolescent and teenage children. When substance use borders on substance abuse it is time for the parent to draw the line.

The permissive parenting type has been discussed extensively in this chapter as a non-problematic parenting style and one that increases conformity, but the potential negative ramifications of employing this parenting technique, as suggested by a plethora or prior research,

must be discussed once more. Simply, permissive parents seem to believe that they cannot simultaneously provide discipline for their children and shower them with love and affection. As seen, the desire to be a friend and not a parent has disastrous results. Parents must be made aware that a lack of discipline, guidance, ground rules, and expectations has deleterious consequences for their children. Permissive parents must be told that their children are more likely than children who are parented with a more balanced approach of discipline and love to commit acts of deviance, delinquency, and crime in part due to their style of parenting. Once they are made aware of the potential harm that they are causing their children and the potential gamesmanship techniques that their children are using, they must be willing to embrace and implement a new philosophy of parenting.

Given the findings related to neglecting/rejecting parenting, it remains irresponsible to employ this style of parenting. Additionally, it seems nearly impossible that a neglecting/rejecting parent would make wholesale changes to their style of parenting. Instead, attention should be given to children with this type of parent. They must be given the guidance that they lack. In addition, researchers must continue to examine the effects of this particular parenting style. This should be more easily accomplished with the newly created neglecting/rejecting measurement scale. Obviously, further research into this particular type of parenting only represents one direction for future research on Baumrind's typology of parenting styles.

Strengths and Limitations

Strengths

The current study sought to expand the body of knowledge on the effects of parenting styles in a number of ways. First, it was necessary to develop a standardized measurement

instrument in order to completely measure Baumrind's typology of parenting styles. Granted, Buri (1991) introduced a respectable, if not very good, Parental Authority Questionnaire (PAQ) in an effort to gauge the impact that authoritarian, authoritative, and permissive parenting has on children. In order to examine the impact of neglecting/rejecting parenting, an additional scale was created, tested, and analyzed to ensure that it measured the fourth parenting style. As discussed in Chapter Three, a survey instrument containing ten neglecting/rejecting items measuring maternal and paternal parenting was administered at pre-test; internal consistency scores were respectable and very good. Each ten-item scale was shortened to five items for the current study in order to reduce response times and increase response rates. The shortened scales achieved similar internal consistency scores to the lengthier original scales. With additional research, this scale has the potential to make an important contribution, and the current study could not have been completed sufficiently without the creation of the neglecting/rejecting scale.

Second, the creation of the new scale allowed the researcher to test the effects that neglecting/rejecting parenting had on the participants. As discussed in Chapter Two and above, very few studies have examined the impact of Baumrind's fourth parenting type. The importance of assessing the entire typology cannot be understated; the current study has added to the limited research on Baumrind's entire typology.

Third, the current research is only one of a handful of studies to introduce aspects of criminal behavior into the study of Baumrind's typologies. Each of the earlier studies that have examined criminal behavior in this way have been limited either by sample size (Haapasalo, 2001; Palmer & Gough, 2007) or by measurement instrument (Schoeder et al., 2010). Haapasalo (2001) surveyed 89 male inmates in a Finnish prison and Palmer and Gough (2007) asked 71 young men to complete a questionnaire – 40 were prior offenders and 31 were non-offenders.

Schroeder et al. (2010) had a respectable sample (n = 662), but their measurement instrument only had seven items measuring demandingness and ten items measuring responsiveness. These efforts have laid the foundation for the current study, which has a sample size of 409 respondents (298 university students and 111 county jail inmates). While it would be naïve to claim that the average college student has not engaged in any criminal activities in his or her life it also would be obvious to claim that the average county jail inmate has a more extensive criminal history than the average non-inmate, thus the use of both samples was needed in order to assess the impact of parenting styles on criminal behavior. Additionally, the inclusion of each sample allowed the researcher to compare effects that parenting has had on college students with the effects that parenting has had on jail inmates.

Finally, the researcher was able to generate a random sample of university students to distribute the questionnaire to via Qualtrics, an emerging web-based survey interface. A random sample of 2,000 undergraduate students was generated from the entire undergraduate population. Using Qualtrics, the researcher was able to send an email containing the informed consent form and link to the survey to everybody who was randomly selected to participate. Weekly reminders were sent to those who had not completed the survey. Instead of randomly selecting classes to survey, the use of a web-based tool allowed the researcher to randomly select individual respondents and limit waste generated by the use of paper questionnaires. The use of technology also allows researchers to draw samples of respondents from multiple locations at once, which should help enhance future research efforts.

Limitations

There were a handful of limitations associated with the current study. First, the sample was generated from one mid-sized state university in the northeast and two county jails in the

same region. The use of students from one university limits the generalizability of the findings. In addition, jail administration at both facilities limited the researcher's access to inmates with the lowest security risks. Thus, the researcher was not able to survey inmates with more extensive or violent criminal histories. The ability to replicate this study at other universities and in other correctional settings throughout the United States undoubtedly would increase the generalizability of the findings.

A second limitation centers on the sample of inmates who participated. As mentioned, the interaction with inmates was limited to those who posed the lowest level of risk. In order to be non-coercive, participation was voluntary, thus the sample of 111 inmate respondents is a convenience sample. Given the research-related protections afforded to incarcerated individuals in the United States this was not unexpected. Perhaps in the future more time should be devoted to meeting with inmates prior to survey distribution in order to explain the project and answer questions about it. For example, one jail administrator mentioned that many inmates did not want to participate because they were not comfortable with their reading comprehension skills despite the administrator's reassurance that the researcher would go through the entire survey with the inmate. Situations like that could be resolved beforehand with reassurances from the researcher; it is definitely something to keep in mind as this research grows.

An additional limitation is the lack of diversity in the sample. Of the 391 respondents who reported their race, approximately 82% (n = 321) were white. Given the demographics of the university, which at the time reported a student population that was 87% white (*Fact Sheet*, Fall 2010), it was not surprising that nearly 89% (n = 252 out of 284 reported) of the student sample was white. Nearly 65% (n = 69 out of 107 reported) of the county jail inmate sample was white, which was higher than the mid-year estimates generated by the Bureau of Justice Statistics

that suggested local county jails were 44.3% white, 37.8% black, and 15.8% Hispanic (Minton, 2011). Due to this lack of racial diversity, the researcher was unable to make race-based comparisons regarding the effects of parenting styles; future research must take this limitation into consideration and correct it accordingly.

Another limitation of the current study was the overrepresentation of female respondents. As discussed in Chapter Four, over 70% of the student sample was female despite a university population that was approximately 57% female (*Fact Sheet*, Fall 2010). Again, this may be due to women being more cooperative or attuned to the subject matter. Additionally, females represented 32.4% of the county jail inmate sample. Minton (2011) noted that at mid-year 2010, females comprised only 12% of all county jail inmates. This overrepresentation can be attributed to a number of things, including: the convenient nature of the sample, the willingness of incarcerated female respondents to discuss ideas related to parenting with the researcher, and the fact that women in the rural county jail were allowed to leave their housing unit in order to participate in the research. Although the overrepresentation of female respondents represents a limitation it also is an opportunity to move the research forward. As discussed in Chapter Two, very few studies that have examined the link between parenting style and delinquency/criminality have used female participants; the current study should begin to fill in some of those gaps.

Directions for Future Research

Future studies on the link between Baumrind's typology of parenting styles and deviant, delinquent, and criminal behavior must divert from the current research in a number of ways. First, future research efforts must be made in other geographical regions. The current research focused on one state university and two county jails in the northeast. This simply needs to be

expanded. Research efforts must be implemented at state and private universities throughout the country. Access must be sought at a variety of correctional facilities. One thing that limited the current research was the fact that most of county jail inmate sample were incarcerated for minor offenses. In order to access a more serious and violent criminal population efforts must be made to get into state and federal prisons. Obviously, access to other municipal and county jails also should be sought.

In addition to surveying inmate populations at a variety of correctional institutions, future research should focus on specific types of offenders. Given the fact that there is little research pertaining to Baumrind's typology with criminal offenders, focusing on specific types of offenders represents a proverbial gold mine of information. It will be interesting to examine how white collar criminals, murderers, and sex offenders were parented. On the other hand, the general population should also be included in future research. Surveying specific communities, cities, and states will allow researchers to determine if the effects that parenting has on criminal behavior are simply regional or if there are far-ranging implications of parenting styles.

A concerted effort to target more universities and correctional facilities in other areas should increase the racial diversity of the sample population. According to Ryu (2010), minorities make up approximately 30% of the population at two-year and four-year colleges and universities compared to 13% of the population at the university used in the current study. Additionally, 35% of the current county jail inmate sample was minority, whereas 55% of county jail inmates nationwide are minority (Minton, 2011). Hopefully, expanding the racial diversity of the sample will allow the researcher to accomplish things that could not be accomplished given the racial homogeneity of the current sample.

Early research by Baumrind (1972) claimed that authoritarian parenting benefited African American females, while more recent research (Avenevoli et al., 1999; Steinberg et al., 2006) has claimed that authoritarian parenting is not as detrimental to African American children as it may be to children with other racial backgrounds. Additionally, Schroeder et al. (2010) claimed that African American children with permissive parents are in the most precarious situation and are more likely than other African American children to engage in delinquency and crime. Walker et al. (2007) reported a variety of findings on the impact of parenting styles on Hispanic and African American youth, most notably that medium levels of parent-child attachment mitigated delinquency in African American youth while low and high levels predicted delinquency. Due to the lack of racial diversity in the current sample, the researcher was unable to substantiate or refute findings from these earlier studies.

Finally, in addition to examining the effects that parenting style has on behavior in various racial groups, an increasingly diverse sample should allow the researcher to study how the changing cultural definition of "family" impacts parenting and behavior; data were collected in order to achieve this goal, but this line of research was outside the scope of the current analysis. When Baumrind first began her research at Berkeley in the mid-1960s the prototypical family was made up of a husband and wife and their children. Over the past four decades the definition of "family" has changed considerably. Currently, married or unmarried couples caring after their own children, or step children, or adopted children comprise a typical family. Grandparents raising their grandchildren; aunts and uncles raising their nieces and nephews; adult brothers and sisters raising their adolescent brothers and sisters comprise a typical family. Simply, researchers must take these changing definitions into account when examining the impact that parenting has on criminal behavior.

Conclusion

Seasoned parents and new parents, alike, often joke that parenting does not come with a manual or a set of rules. Most of the time parents hope to provide the best example for their child to follow and silently pray that the child does not get into trouble. Although one should not characterize Baumrind's typology of parenting styles as a rulebook for parents, it should be thought of as a guide. Again, Baumrind's typology does not discuss specific parenting behaviors nor does it provide a "dos" and "don'ts" list of how to parent. The typology simply defines parenting types and attempts to lay a foundation of ideal parenting methods.

The current research examined the impact that Baumrind's four parenting types – authoritarian, authoritative, permissive, and neglecting/rejecting – had on certain behavioral outcomes and the mixed results suggest that a parenting manual would do little good. Neglecting/rejecting parenting was the most harmful type of parenting. For the most part, neglecting/rejecting parents will eschew disciplining or communicating with their children. According to the findings of this study and previous research, this leads to an increased likelihood of property crime as well as alcohol, tobacco, marijuana, and other hard drug use. Given these results, it is imperative that parents strive to instill discipline in their children while at the same time creating and maintaining warmth for their children.

Surprisingly, however, the permissive parenting style predicted a reduced likelihood of offending in most instances. This finding contradicted most of the prior research which has suggested that parents who fail to instill discipline wind up with children who exhibit a multitude of behavior problems. Given this surprising finding, more research is needed into the permissive parenting type because it would be careless to recommend that parents provide zero guidance and rules for their children.

Finally, the necessity of cross-disciplinary research cannot be understated. Baumrind's typology originated in the discipline of psychology and has remained there, save for a limited number of researchers. As criminologists have slowly begun to introduce the typology into studies of delinquency and crime, those who study parenting have gained greater insight into some of the affects that different styles of parenting have on behavioral outcomes. Ideally, academicians, practitioners, policy-makers, parents, and children should benefit from the increased integration of parenting styles steeped in psychology and behaviors based in criminology.

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APPENDIX A

Studies Examining the Link between Parenting Style and Adolescent Behavioral Problems

Author	Setting	Sample	Method	Measures	Findings
Barber, Olsen, & Shagle (1994)	Knox County, TN	473 adolescents	Secondary data analysis of self-report data	Parental control	Children of Authoritarian and Permissive parents showed more problem behaviors than those of Authoritative
Baumrind (1967)	Berkeley, CA	134 Caucasian families w/ pre-school age children	Observation of children in school setting and family in home setting; structured interviews w/ parents	Parent Behavior Ratings; see Table X for description of the PBR	Behavior of children reflected behavior of parents
Baumrind (1971)	Berkeley, CA	134 Caucasian families w/ pre-school age children	Observation of children in school setting and family in home setting; structured interviews w/ parents	Parent Behavior Ratings; see Table X for description of the PBR	Fewer problem behaviors in male children of Authoritative parents
Baumrind (1972)	Berkeley, CA	16 African American families w/ pre-school age children	Observation of children in school setting and family in home setting; structured interviews w/ parents	Parent Behavior Ratings; see Table X for description of the PBR	Authoritarian parenting appeared beneficial for African American girls; these girls displayed few anti-social behaviors
Baumrind & Black (1967)	Berkeley, CA	95 families w/ pre-school age children	Observation of children in school setting and family in home setting; structured interviews w/ parents	Parent Behavior Ratings; see Table X for description of the PBR	Fewer problem behaviors in male children of Authoritative parents

Lamborn, Mounts, Steinberg, & Dornbusch (1991)	Nine high schools in CA and WI	4,081 high school students	Self-report questionnaire	Parenting style (demandingness and responsiveness)	Fewer problem behaviors in male children of Authoritative parents; male children with Neglecting/Rejecting parents had poorest outcomes
Paulussen-Hoogeboom, Stams, Hermanns, Peetsma & van den Wittenboer (2008)	North Holland, the Netherlands	196 pre-school age children and their mothers	Self-report questionnaire	Responsive to child; accepting of child; consistent parenting; discipline; power assertion; love withdrawal	Fewer problem behaviors in male children of Authoritative parents
Querido, Warner, & Eyberg (2002)	Waiting room of a pediatric dental clinic	108 female African American caregivers of pre-school age children	Self-report questionnaire	Authoritarian, authoritative, and permissive parenting style	Fewer problem behaviors in male children of Authoritative parents; children of Authoritarian and Permissive parents showed more problem behaviors than those of Authoritative
Vieno, Nation, Pastore, & Santinello (2009)	Padua, Veneto Italy	840 Italian adolescents and 657 of their mothers	Self-report questionnaire	Parental control (10 items); parental knowledge (4 items)	Fewer problem behaviors in male children of Authoritative parents; children of Authoritarian and Permissive parents showed more problem behaviors than those of Authoritative

APPENDIX B

Studies Examining the Link between Parenting Style and Alcohol, Cigarette, and Substance Use by Adolescents

Author	Setting	Sample	Method	Measures	Findings
Baumrind (1991)	Berkeley, CA	139 Caucasian families w/ high school age children	Observation of child for 20 hours and parents for 30 hours; structured interviews w/ parents	Six family types: authoritative, democratic, directive, good-enough, nondirective, and unengaged	Authoritative parenting likely to result in non-drug/alcohol using children; heavy drug users and alcoholics likely to have neglecting/rejecting (unengaged) parents
Chassin et al. (2005)	Midwestern county	382 adolescents age 10-17; 98% white/non-Hispanic	Self-report questionnaire	Parenting style: Behavioral control (9 items from Child Report of Parenting Behavior Inventory); Acceptance (7 items from Network of Relationships Inventory)	Those with Authoritative, Authoritarian, and Permissive parents were significantly less likely than Neglecting/Rejecting to report smoking
Harakeh, Scholte, Vermulst, de Vries, & Engels (2004)	Six secondary schools near Utrecht, the Netherlands	1,070 adolescents age 10-14	Self-report questionnaire	Psychological control (9 items); Strict control (4 items); Parental knowledge (4 items)	Psychological control, strict control, and parental knowledge are not significantly related to adolescent smoking behavior
Huver, Engels, van Breukelen, & de Vries (2007)	Eindhoven, the Netherlands	482 Dutch adolescents	Self-report questionnaire	Parenting style (22 items)	Parenting style not associated with adolescent smoking

Jackson, Bee-Gates, & Henriksen (1994)	Six schools in Northern California	937 adolescents in grades 3-8	Self-report questionnaire	Authoritative (6 items) and non-authoriative (3 items) parenting	Lowest rates of intention, initiation, and experimentation with smoking are related to authoritative parenting
Jackson, Henriksen, & Foshee (1998)	North Carolina	1,236 fourth and sixth graders	Self-report questionnaire	Authoritative Parenting Index (demandingess and responsiveness)	Children of authoritative parents significantly less likely to report tobacco/alcohol use
Mott, Crowe, Richardson, & Flay (1999)	Los Angeles and San Diego counties (CA)	2,352 ninth-graders	Self-report questionnaire	Parenting style (2 items)	No significant findings related to parenting style and smoking
Patock-Peckham & Morgan-Lopez (2007)	Arizona State University; Tempe, AZ	441 college students	Self-report questionnaire	Authoritarian, authoritative, and permissive parenting style	Maternal styles not significantly related to alcohol use; paternal authoritativeness less likely to result in alcohol abuse
Simons-Morton, Haynie, Crump, Eitel, & Saylor (2001)	Maryland suburb; near Washington, D.C.	4,263 middle school students	Self-report questionnaire	Involvement (6 items); expectations (6 items); monitoring (4 items); support (5 items); psychological autonomy (7 items); parent-child conflict (4 items)	Children of parents who displayed positive behaviors were less likely to smoke and drink than those whose parents displayed negative behaviors

APPENDIX C

Studies Examining the Link between Parenting Style and Delinquency

Author	Setting	Sample	Method	Measures	Findings
Avenevoli, Sessa, & Steinberg (1999)	Nine high schools in CA and WI	11,669 high school students	Self-report questionnaire	Parents' love, responsiveness, and involvement (15 items); strictness (9 items); psychological autonomy (15 items)	Authoritative parenting associated with lower levels of delinquency; children of permissive and neg/rej more likely to be delinquent; authoritarian parenting not as bad for African American children
Chambers, Power, Loucks, & Swanson (2000)	Young Offender's Institution in Scotland	122 male offenders, age 15-22	Semi-structured interviews	Parental Bonding Instrument (care and control)	Offenders perceived parents to be controlling and not caring (authoritarian)
Hoeve, Smeenk, Loeber, Stouthamer-Loeber, van der Laan, Gerris, & Dubas (2007)	Pittsburgh, PA and the Netherlands	472 boys in first cohort of Pittsburgh Youth Study; 132 male participants from Child-rearing and Family in the Netherlands Study	Secondary data analysis of self-report data	Parental affection (5 child items/9 adult); conformity (4/8 items); ignoring (5 adult items); responsiveness (8child items)	Authoritative parenting associated with lower levels of delinquency
Jackson, Henriksen, & Foshee (1998)	North Carolina	1,490 ninth and tenth graders	Self-report questionnaire	Authoritative Parenting Index (demandingness and responsiveness)	Children of authoritative parents significantly less likely to report violent behavior

Palmer & Hollin (2001)	West Midlands area of England	94 students, age 12-18	Self-report questionnaires	Perceptions of parenting (control, guidance, and affective bond)	Authoritative significant negative relationship with delinquency; more authoritarian style significant positive relationship with delinquency
Paschall, Ringwalt, & Flewelling (2003)	Medium-size southeastern city	175 adolescent African American boys and their mothers	Self-report questionnaire	Monitoring (9 items); Control (6 items); Communication (11 items); P-C Relationship (16 items)	Monitoring and control significant negative association with delinquency; control had higher impact in father-absent families
Stattin & Kerr (2000)	Seven mid-Sweden communities	703 14-year-old Swedish youths	Self-report questionnaire	Monitoring (9 items); Disclosure (5 items); Solicitation (5 items); Control (6 items)	All measures significant negative relationship with delinquent behavior; solicitation related to higher delinquency than disclosure
Steinberg, Blatt-Eisengart, & Cauffman (2006)	Philadelphia, PA, and Phoenix, AZ	1,355 juvenile offenders	Interview with juvenile	Parental warmth and firmness	Authoritative parenting associated with lower levels of delinquency; children of permissive and neg/rej more likely to be delinquent; authoritarian parenting not as bad for African

					American children
Steinberg, Lamborn, Darling, Mounts, & Dornbusch (1994)	Nine high schools in CA and WI	6,357 high school students	Self-report questionnaire	Parents' love, responsiveness, and involvement (10 items); strictness (9 items)	Authoritative parenting associated with lower levels of delinquency; children of permissive and neg/rej more likely to be delinquent
Steinberg, Mounts, Lamborn, & Dornbusch (1991)	Nine high schools in CA and WI	7,600 high school students	Self-report questionnaire; students assigned to one of 16 niches	Parents' love, responsiveness, and involvement (15 items); strictness (9 items); psychological autonomy (15 items)	Authoritative parenting associated with lower levels of delinquency
Simons, Simons, Burt, Brody, & Cutrona (2005)	Multiple sites in GA and IA	633 fifth graders and primary caretaker; secondary caretaker when available	Secondary data analysis of FACHS dataset (interview data)	21-item authoritative parenting survey	Authoritative parenting associated with lower levels of delinquency
Walker, Maxson, & Newcomb (2007)	Los Angeles County	349 African American and Hispanic boys, age 12-17	Structured interviews	Attachment (includes family closeness and parental monitoring)	Higher levels of attachment led to lower levels of delinquency in Hispanic youth; Medium attachment led to low delinquency in African American youth with high and low attachment leading to high delinquency

APPENDIX D

Studies Examining the Link between Parenting Style and Criminality

Author	Setting	Sample	Method	Measures	Findings
Haapasalo (2001)	Five Finnish prisons	89 Finnish male inmates	Self-report questionnaire	Parent Behavior Inventory (108 items; 18 subscales)	Specific style did not emerge significantly; most self-reports suggested rejection
Palmer & Gough (2007)	Not specified	40 young male offenders (property and person); 31 young male non-offenders	Self-report questionnaire	EMBU scale	Maternal authoritativeness higher for non-offenders and property offenders; paternal authoritativeness higher for non-offenders
Schroeder, Bulanda, Giordano, & Cernkovich (2010)	Large metropolitan area in OH	662 Caucasian and African American adults	Self-report questionnaire	7-item demandingness scale; 10-item responsiveness scale	Permissive parenting more likely to result in criminal behavior. Amongst whites, authoritarianism more likely to lead to crime; permissiveness amongst African Americans

APPENDIX E

Informed Consent/Invitation to Participate – Jail Inmates

Informed Consent Form

You are invited to participate in a research study. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions please do not hesitate to ask. You are eligible to participate because you are currently housed in a county jail in the Commonwealth of Pennsylvania. If you are under the age of 18, however, you are not permitted by law to complete this survey.

My name is Jason Spraitz and I am asking for your participation to help me complete my dissertation research. I am a doctoral student at Indiana University of Pennsylvania; **neither I nor my research is connected with any law enforcement agency, any court system, any local/county jail, or the Pennsylvania Department of Corrections**. The purpose of this study is to examine the effects that perceived parenting style has on behavior. Participation will require approximately 45-60 minutes of your time. Participants in this study will not be subject to risk beyond a minimal level.

Your participation in this study is voluntary. You are free to decide not to participate in this study or to withdraw at any time. If you choose to not participate simply sit quietly or return to the main housing unit. If you choose to withdraw while completing the survey simply write the word "withdraw" on the survey in front of you, your request to withdraw will be respected and the incomplete survey will be shredded. If you choose to participate your identity will remain anonymous; please do not place any identifying information (such as your name or ID number) on the survey as I do not want to able to identify which response came from a particular respondent who completes the survey. Your responses will be considered only in combination with those from other participants. The information obtained in the study may be published in peer-reviewed journals or presented at professional meetings but your identity will remain anonymous.

Your participation in this study is completely voluntary. Thank you in advance for your assistance with this project. If you have any questions or comments please feel free to contact me or my dissertation chairperson, Dr. Jamie Martin.

Jason D. Spraitz, M.S.
Doctoral Candidate
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Jamie Martin, Ph.D.
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Indiana, PA 15705-1002
Email: jmartin@iup.edu

The Indiana University of Pennsylvania Institutional Review Board has approved this project for the Protection of Human Subjects (Phone: 724-357-7730).

I have read and understand the information on the form and I consent to volunteer to be a subject in this study. I understand that my responses are completely anonymous and that I have the right to withdraw at any time. Providing responses implies my consent to participate.

APPENDIX F

Informed Consent/Invitation to Participate – University Students

Greetings,

You are receiving this email message because you are invited to participate in a research study. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions please do not hesitate to ask; you can use the phone number or email address listed below to contact me. You are eligible to participate because you are an undergraduate student at IUP who was randomly chosen to participate in the study. Students under the age of 18, however, are not permitted by law to complete this survey. Although the opinions of those under the age of 18 are important it would be appreciated if those under 18 would not click on the survey link below.

##LINK HERE##

My name is Jason Spraitz and I am asking for your participation to help me complete my dissertation research. The purpose of this study is to examine the effects that perceived parenting style has on behavior. Participation will require approximately twenty minutes of your time. Again, your participation would be most helpful and I would be very appreciative. **Once you complete the survey you will be able to enter yourself in a raffle to win one of four $25 gift cards to the Co-op Store**. Participants in this study will not be subject to risk beyond a minimal level.

Your participation in this study is voluntary. You are free to decide not to participate in this study or to withdraw at any time. If you choose not to participate you simply do not have to click on the link to the survey. If you choose to withdraw while completing the survey, your request to withdraw will be respected and no information pertaining to you will be collected. If you choose to participate your identity will remain anonymous; there is no way for you to place any identifying information on the survey. Your responses will be considered only in combination with those from other participants. The information obtained in the study may be published in peer-reviewed journals or presented at professional meetings but your identity will remain anonymous. The researcher will be unable to identify which response came from a particular student who completes the survey.

Your participation in this study is completely voluntary. Thank you in advance for your assistance with this project. If you have any questions or comments please feel free to contact me or my dissertation chair, Dr. Jamie Martin.

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The Indiana University of Pennsylvania Institutional Review Board has approved this project for the Protection of Human Subjects (Phone: 724-357-7730).

I have read and understand the information on the form and I consent to volunteer to be a subject in this study. I understand that my responses are completely anonymous and that I have the right to withdraw at any time. Clicking on the link implies my consent to participate.

APPENDIX G

Survey Instrument

Section I:

This section contains statements about your mother and/or mother figure. Please indicate your level of agreement or disagreement with the statement by circling the letter next to it.
Before you begin, please circle the letter indicating which female raised you the most while you were growing up and respond to the following statements with that person in mind.

1. The woman who raised me the most while I was growing up was:

   A. Biological Mother
   B. Adopted Mother
   C. Foster Mother
   D. Step Mother
   E. Grandmother
   F. Sister
   G. Aunt
   H. Female Cousin
   I. Other Female Relative: _____
   J. None **→Skip to #22 if selected**

2. Even if I didn't agree with her, my mother felt that it was for my own good if I was forced to conform to what she thought was right:

   A. Strongly Agree
   B. Agree
   C. Neither Agree nor Disagree
   D. Disagree
   E. Strongly Disagree

3. As I was growing up, I knew what my mother expected of me, but I also felt free to discuss those expectations with my mother if I felt that they were unreasonable:

   A. Strongly Agree
   B. Agree
   C. Neither Agree Nor Disagree
   D. Disagree
   E. Strongly Disagree

4. As I was growing up, I had no idea what my mother expected of me:

   A. Strongly Agree
   B. Agree
   C. Neither Agree Nor Disagree
   D. Disagree
   E. Strongly Disagree

5. While I was growing up my mother felt that children should have their way in the family as often as the parents do:

   A. Strongly Agree
   B. Agree
   C. Neither Agree Nor Disagree
   D. Disagree
   E. Strongly Disagree

6. Whenever my mother told me to do something, she expected me to do it immediately without asking any questions:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

7. As I was growing up, my mother consistently gave me direction and guidance in rational and objective ways:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

8. My mother never gave me any guidance as I was growing up:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

9. My mother felt that children need to be free to make up their own minds and do what they want to do, even if parents might not agree:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

10. My mother always felt that more force should be used by parents in order to get their children to behave the way they are supposed to:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

11. My mother gave me direction for my behavior and activities as I was growing up and she expected me to follow her direction, but she was always willing to listen to my concerns:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree

12. I feel like I raised myself more than my mother raised me:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

13. Most of the time as I was growing up my mother did what I wanted her to do when making decisions:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

14. As I was growing up, my mother let me know what behavior she expected of me, and if I didn't meet those expectations, she would punish me:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

15. As I was growing up, my mother gave me clear direction for my behaviors and activities, but she was also understanding when I disagreed with her:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

16. I don't know my mother's views about discipline because she never communicated them with me:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

17. As I was growing up, my mother allowed me to decide most things for myself without a lot of direction from her:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

18. As I was growing up, I knew what my mother expected of me and she insisted that I conform to those expectations simply out of respect for her authority:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

19. As I was growing up, if my mother made a decision in the family that hurt me, she was willing to discuss that decision with me and admit if she had made a mistake:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

20. I did not learn effective communication skills from my mother:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

21. As I was growing up, my mother allowed me to form my own point of view on family matters and she generally allowed me to decide for myself what I was going to do:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

Section II:

This section contains statements about your father and/or father figure. Please indicate your level of agreement or disagreement with the statement by circling the letter next to it.
Before you begin, please circle the letter indicating which male raised you the most while you were growing up and respond to the following statements with that person in mind.

22. The man who raised me the most while I was growing up was:

    A. Biological Father
    B. Adopted Father
    C. Foster Father
    D. Step Father
    E. Grandfather
    F. Brother
    G. Uncle
    H. Male Cousin
    I. Other Male Relative: _____
    J. None **→Skip to Section III if selected**

23. Even if I didn't agree with him, my father felt that it was for my own good if I was forced to conform to what he thought was right:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

24. As I was growing up, I knew what my father expected of me, but I also felt free to discuss those expectations with my father if I felt that they were unreasonable:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

25. As I was growing up, I had no idea what my father expected of me:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

26. While I was growing up, my father felt that children should have their way in the family as often as the parents do:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

27. My father always felt that more force should be used by parents in order to get their children to behave the way they are supposed to:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

28. As I was growing up, my father consistently gave me direction and guidance in rational and objective ways:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

29. My father never gave me any guidance as I was growing up:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

30. My father felt that children need to be free to make up their own minds and do what they want to do, even if parents might not agree:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

31. My father felt that wise parents should teach their children who the boss is in the family:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

32. My father had clear standards of behavior for me as I was growing up, but he was willing to adjust those standards to my needs:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

33. I feel like I raised myself more than my father raised me:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

34. Most of the time as I was growing up my father did what I wanted her to do when making decisions:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

35. My father has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to do:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

36. My father gave me direction for my behavior and activities as I was growing up and he expected me to follow his direction, but he was always willing to listen to my concerns:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

37. I did not learn discipline from my father:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

38. As I was growing up, my father allowed me to decide most things for myself without a lot of direction from him:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

39. As I was growing up, I knew what my father expected of me and he insisted that I conform to those expectations simply out of respect for his authority:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

40. As I was growing up, my father gave me clear direction for my behaviors and activities, but he was also understanding when I disagreed with him:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

41. As I was growing up, my father did not direct my behaviors, activities, and desires:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

42. As I was growing up, my father allowed me to form my own point of view on family matters and he generally allowed me to decide for myself what I was going to do:

    A. Strongly Agree
    B. Agree
    C. Neither Agree Nor Disagree
    D. Disagree
    E. Strongly Disagree

I am interested in who was responsible for raising you while you were growing up. In the following question, "parents" refers to the individuals who you consider to be your mother and father.

43. When I was growing up, I lived with:

    A. Two parents; both parents lived there and were involved in raising me
    B. My mother, but my father was also involved in raising me
    C. My father, but my mother was also involved in raising me
    D. My mother, and she was the only one who raised me
    E. My father, and he was the only one who raised me
    F. Neither of my parents were involved in raising me
    G. Other (please explain) _____

Section III:

This section contains questions asking about behaviors that you may or may not have engaged in. Please answer questions as honestly as possible.

Read the following events and mark the "Have you ever?" box with an "**X**" if you have engaged in that activity. Then estimate the number of times that you have engaged in the activity and place the NUMBER in the box.

Action	Have you ever?	How many times?
Hurt someone badly enough that they needed medical treatment		
Purposely damaged or destroyed property belonging to another person		
Paid to have sexual relations with another person		
Set off a fire alarm for fun		
Ran away from home while under the age of 18		
Used a weapon to threaten another person		
Stolen (or tried to steal) a motor vehicle, such as a car or motorcycle		
Been paid for having sexual relations with someone		
Carried a gun without a permit		
Lied about your age to gain entrance or to purchase something (e.g., lying about your age to buy liquor or get into a bar)		
Purposely killed someone		
Stolen (or tried to steal) something worth more than $50		
Sold marijuana		
Thrown objects (such as rocks, snowballs, or bottles) at cars or people		
Cheated in school (e.g., copying another student's answers or cheating on a test)		
Hurt someone in a minor way (e.g., slap in face, push to ground)		
Lied to an authority figure (such as a teacher, boss, or parent)		

Read the following events and mark the "Have you ever?" box with an "**X**" if you have engaged in that activity. Then estimate the number of times that you have engaged in the activity and place the NUMBER in the box.

Action	Have you ever?	How many times?
Carried a hidden weapon other than a plain pocket knife		
Skipped classes without an excuse		
Attacked someone with the idea of seriously hurting or killing them		
Stolen (or tried to steal) things worth less than $10		
Bought alcohol for a minor or provided alcohol for a minor		
Been loud, rowdy, or unruly in a public place (e.g., disorderly conduct)		
Been suspended from school		
Hit (or threatened to hit) another person		
Stolen money or other things from another person		
Failed to return extra change that a cashier accidently gave you		
Been drunk in a public place		
Had (or tried to have) sexual relations with someone against their will		
Avoided paying for such things as movies, bus or subway rides, and food		
Made obscene telephone calls, such as calling someone and saying dirty things		
Used force (strong-arm methods) to get money or things from another person		
Stolen (or tried to steal) things worth between $10 and $50		
Broken into a building or vehicle (or tried to break in) to steal something or just to look around		
Knowingly bought, sold or held stolen goods (or tried to do any of these things)		
Sold drugs other than marijuana		
Gotten into verbal altercations (shouting/screaming) with another person		

Read the following list of alcohol and drugs and mark the "Have you ever?" box with an "**X**" if you have used that substance.

Substance	**Have you ever?**
Tobacco (e.g., Cigarettes, Chew) while under the age of 18	
Alcohol (e.g., beer, wine, liquor) while younger than legal drinking age	
Alcohol (e.g., beer, wine, liquor) while of – and older than – legal drinking age	
Marijuana	
Hallucinogens (e.g., LSD, Acid, Mescaline, Peyote)	
Amphetamines (e.g., Uppers, Speed)	
Barbiturates (e.g., Downers, Reds)	
Heroin	
Cocaine (e.g., Powder, Crack)	
Methamphetamines	
Prescription Pain Killers without valid prescription (e.g., Vicodin, Percocet)	

92. Did the way that your parents raised you contribute to your taking part in the behaviors asked about above? *Yes* *No*

93. Do you blame your parents for the behaviors that you took part in? *Yes* *No*

94. Are you more likely to keep your feelings inside you or let them out? *Inside* *Outside*

Section IV:

95. How old are you? _____

96. What is your sex? *Male* *Female*

97. With what race do you most identify:

African American/Black	*Asian/Pacific Islander*
Caucasian	*Hispanic*
Native American	*Other* _____