DELIQUEENT GIRLS AND THE RELATION OF THE PARENT-ADOLESCENT RELATIONSHIP AND PEER INFLUENCE TO QUALITY OF DECISION-MAKING

By

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To my son Brandon, my sister Adrianna, and my brother Tony.
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LIST OF TERMS

The terms below are defined as they applied to this research.

**Adolescent**

individuals between the ages of 12 and 18.

**Decision-making**

making choices from the given alternatives of choices and the cognitive process of reaching a decision.

**Juvenile delinquent**

an adolescent who commits criminal offenses that are violations of laws and ordinances committed by persons between the ages of 14 and 18 and have been adjudicated in a court of law (Griffin and Griffin, 1978).

**Parent-adolescent relationship**

the degree of satisfaction, types of disagreements and level of involvement between parent and the adolescent.

**Peer influence**

the degree that an adolescent conforms to the ideals, delinquent behaviors and activities, legal or illegal, of the group of peers that the adolescent primarily associates with and engage in activities with.

**Parent**

is not limited to the biological parents of the juvenile. It is defined as the individual or individuals whose responsibility is to take care of the adolescent. They also can be foster parents, grandparents, or legal guardians.

**Parental involvement**

the amount of time invested by parents in the life of their adolescent doing things with the them, such as school work, daily activities, special activities, as well as the amount of interaction between the parent and juvenile.
My study examined the influence of the parent-adolescent relationship and peer influence on the level of decision-making for girls who are currently in a residential program. My research sought to determine the degree of the relationship between the adolescent’s level of decision-making and the following variables: (a) parental involvement, (b) parent adolescent conflict, and (c) prosocial, antisocial, and neutral peer influence. I hoped that this research might result in the identification of important characteristics that would inform future research and mental health practice.

My study dealt with 102 adolescents who are currently court ordered to a diversion program in Macon, Georgia. Each of the girls completed a Decision-Making Questionnaire, the Berdnt’s Peer Influence Vignettes, and a Parent Environment Questionnaire. The decision-making questionnaire contained demographic questions.

A regression analysis was used to evaluate the contributions of the three variables in predicting the offender’s level of decision-making as measured by the Decision Making Questionnaire (DMQ). There was a significant association between level of decision-making and neutral peer influence. There were no significant associations between parent involvement,
parental conflict, prosocial and antisocial peer influence and level of decision-making of the girls who are delinquent. Discussion of these results, the study’s limitations, and suggestions for future research are then presented.
“Adolescence is a time of increased pressure for problem solving and personal decisions” (Worrell & Danner, 1989, p. 3). During this time, adolescents are required to make lifelong decisions concerning career, health, risky behavior, and school involvement (Fried & Repucci, 2001). Transitioning through this phase can be a difficult time for adolescents and their families. For the adolescent, this is a period full of contradiction, turmoil, rebellion against authority, and idealism, with varying influences from the adolescent’s environment. This is also a time when decision-making increases for an adolescent. Some researchers have noted there is great amount of influence from the environment on the decision-making in the life of an adolescent (Byrnes, 2002; Evans, Brown, & Killian, 2002, Mann, Harmoni, & Powers, 1989). Decision-making has been defined by Byrnes (2002) as making choices from the given alternatives of choices. For adolescents who have conduct problems and have become delinquent, this period can exert much stress on the family unit.

Conduct problems, aggression, and delinquency all refer to antisocial behaviors that reflect a failure of the individual to conform his or her behavior to the expectations of some authority figure (e.g., parent, teacher) or to societal norms, or for the individual to respect the rights of other people (Frick, 1998). Juvenile delinquency is defined as participation in illegal behavior by a minor who falls under a statutory age limit (Segal, Welsh, & Senna, 2003). Current research describes the young female offender as: (a) being 13 to 18 years old, (b) having grown up poor and in a high-crime neighborhood, (c) likely to belong to an ethnic group, (d) having a poor academic history, (e) a high school drop out, (f) experiencing abuse or exploitation, (g) an abuser of drugs and/or alcohol, (h) having unmet medical and mental health needs, (i) feeling
that life is oppressive, and (j) lacking hope for the future (Barnow, Schuckit, Lucht, Ulrich, & Freyberger, 2002; OJJDP, 1998; Dishon, Capaldi & Yoerger, 1999).

Adolescence has been described as a time in which risk-taking behaviors, which lead to delinquent behavior, increases. In 1996, 45% of high school seniors reported having tried marijuana, 30% reported being drunk in the past two weeks, and 22% reported smoking cigarettes daily. Nearly two-thirds of U.S. teenagers reported initiation of sexual intercourse prior to high school graduation. In consequence, those who are sexually active experience a high number of sexually transmitted diseases and for girls, unintended pregnancies (U.S. Department of Health and Human Services, 1997).

There are several studies concerning the decision-making of adolescents. These studies have focused on informed consent (Ambuel & Rapapport, 1992), judgment and taking responsibility (Fried & Repucci 2001), competence to stand trial (Woolard, 1998), and waiver of rights (Grisso, 1981). In regard to risky decision-making, these studies focus on early pregnancy (Gordon, 1996), good and poor judgment, (Cauffman & Steinberg, 2001), and sexual risk-taking (Koniak-Griffin & Brecht, 1995). Fried and Reppucci (2001) noted, “while adolescent decision-making has been studied in a least a few criminal contexts, it has not been studied in relation to decisions that lead to criminal activity” (p. 47). Nor has risk-decision-making been studied exclusively in females. Much of the research on delinquency has been with boys. This is due partly because the number of boys being arrested has been much higher than the arrest rates for girls. However, this trend has now begun to change (Scahill, 2002) and there needs to be a focus on the faulty decision-making of girls that causes them to get arrested, become chronic offenders, and even enter into an adulthood of criminal activity. This trend will
be discussed in a later section of this dissertation. My study exclusively examines delinquent
girls’ decision-making processes and how this is affected by parent and peer factors.

Statement of the Problem

Decisions by adolescents to engage in criminal activities have drastically increased over
the recent years. Adolescent girls now make up the fastest growing segment of the juvenile
justice system and have forced a shift in focus for law enforcement, social services, and others
involved with adolescent girls (Scahill, 2002). “In 1980, there were about 12,000 women in
prison; by 2000 there were over 85,000, more than a seven-fold increase in two decades”
(Maquire, 1994, p. 600). In 1996, Poe-Yamagata and Butts compiled statistics gathered from
the Federal Bureau of Investigations (FBI), National Juvenile Court data archive, and the
Children in Custody census. Some of the more alarming national trends that they noted were:

• arrests of young female offenders increased by 23% while arrests of young male offenders
  increased by 11%;

• court cases involving juvenile females charged with delinquency increased by 31 %
  compared to a 21% increase for juvenile males;

• arrests for violent crime offenses increased by 55% for juvenile females and by 33% for
  juvenile males;

• arrest of female offenders for property crime offenses increased 22% while males decreased
  by 3% (p. 1).

Bloom (2002) noted that, in 1993, 32% of the victims of homicides by girls were members
of their own family and that 79% of those homicides involved a relational conflict, such as an
argument or physical fight with family members. This suggests that there are serious relational
problems at home between adolescent girls and their families that need to be further addressed.

It is also important that my research inform gender-specific treatment for girls currently being
developed. Although there is an increased need for services for delinquent girls, this population
still remains overlooked and underserved by the juvenile justice system (Chesney-Lind, 1998).
Until recently, most of the research on delinquency has been geared toward males, leaving researchers and clinicians to ponder whether the findings are also applicable to girls (Calhoun, Jurgens, & Chen, 1993). Given the negative outcomes for many, if not most, delinquent girls, it is imperative for clinicians and researchers to identify and focus on variables that will help delinquent girls and their families function better.

Silverhorn and Frick (2001) have proposed that most antisocial girls follow a delayed-onset pathway, in which putative factors that contribute to antisocial behavior are present in childhood, but the manifestation of antisocial behavior does not occur until adolescence. Age of onset is an important dimension in terms of both identifying etiologic factors and developing effective treatment or prevention programs (Keenan et al., 1999). Frick (1998) noted, they labeled this pattern the delayed-onset trajectory to describe the fact that many of these girls show the same pathological individual (cognitive and neuropsychological dysfunctions) and social (e.g., dysfunctional family backgrounds) factors in childhood, which are characteristic of boys in the childhood-onset trajectory. However, they do not display antisocial behavior until they reach adolescence when factors, such as decreased parental supervision and increased peer acceptance of antisocial behavior, overcome the cultural prohibitions against their display of antisocial behavior (p. 17).

My study will focus on whether or not there is a direct relationship between the quality of decision-making of juvenile delinquent females and the quality of parent-adolescent relations, plus the influences, positive or negative, of their peers. In short, does a poor relationship with family, particularly parent or parents or association with peers who exert negative influences or both contribute to poor decision-making by girls who are delinquent? Although research exists that implies this relationship (Collins & Repinski, 2001; Laursen & Collins, 2005), to date the literature indicates there are no studies that exclusively examine the relationship between adolescent female decision-making and their parent-adolescent relationship plus peer influence. My study will examine the following variables: the parent-adolescent relationship, which consists of parental involvement and parent-child conflict, the influence of the peer group, and
degree of positive decision-making. My research will examine how the decision-making of adolescent is affected by peer influence and the parent-adolescent relationship and to what degree. These factors will be examined to determine whether they correlate or conflict with confident decision-making.

**Theoretical Framework**

Adolescence is a period in which critical decisions are made by the adolescent concerning different aspects of that adolescent’s life. It is a time where adolescents are establishing their identities, exerting their autonomy, and engaged in separation from their primary caregivers. This is also a period where peer relationships are strengthened and solidified. One theory used to explain the decisions made by delinquents is that of Gordon (1996).

Gordon’s theory consists of three overarching components: social and psychological factors, cultural and societal factors, and cognitive components. According to Gordon (1996), the interplay of these three areas informs the decision-making of any group of adolescents, including delinquents, and each area has an effect on the other.

Another theory to explain adolescent decision-making was postulated by Simon (1955). Simon’s theory asserts that “due to cognitive limitations, faster decisions could be made by limiting alternatives considered and constraining analysis” (p. 4), so that the decision makers are limited in their decision-making abilities, thus causing them to make decisions that may be faulty, thus leading to delinquency. Simon attempted to account for obstacles that adolescents may face, such as peer pressure, family problems, or problems in school. “This idea, called Bounded Reality, entails an individual factoring problems into a number of variables and making decisions that appear reasonable rather than optimal” (p. 42). Simon organized the decision-making steps, which he termed “objects of rational calculation” as:

- The set of optimal alternatives;
• The relationship that determines the payoff (satisfaction and goal attainment) as a function of the alternative that is chose

• The preference orderings among payoffs (p. 42).

From Gordon and Simon’s studies, other decision-making perspectives were proposed, including decision theory (Furby & Beyth, 1996). Furby and Beyth (1996) identified several skills of the Janis and Mann (1977) Decision theory that are considered important in effective decision-making: (1) identifying the possible options; (2) identifying the possible consequences that follow from each option; (3) evaluating the desirability of each of the consequences; (4) assessing the likelihood of each consequence; and (5) making a choice using a decision rule (p. 5). It is important to identify what steps in decision-making may be lacking for an adolescent who chooses to engage in criminal decision-making. This part of their study will help to form future programs and the practice of mental health professionals.

The process of socialization influences decision-making based on observed patterns, imitation, associations, and reinforcements that are learned through the child and adolescent’s environment. Several aspects of the parent-child relationship and peer influence can affect the decision-making of delinquent girls. The parent-child relationship can determine what kinds of peers girls eventually decide to choose as friends. Adolescents who have positive parent-child relationships are more inclined to have friends of whom their parents approve.

Girls who have healthy relationships with their parent or parents are also more inclined to imitate the positive parental decision-making. When they have a strong foundation already instilled from their parents, they are less likely to be influenced by peers to engage in criminal decision-making (Lerner & Steinberg, 2004). Moreover, when girls who are delinquent feel that their parents or caregivers do not care, they are more likely to engage in criminal decision-
making and associate with peers who share this sort of risk-prone behavior (Freid & Repucci, 1999).

Adolescents who have disagreements, high levels of tension, and severe anger exchanges with their parents are more prone to turn such things as drugs and alcohol and are less likely to have parenting that promotes positive decision-making than adolescents in less hostile environments (Lerner & Steinberg, 2004). Often this conflict can cause adolescents to run away from home or even run to their peers for support. Although relationships are important to girls, they are less likely to turn to their parents if they do not feel supported. Research has also shown that parents who are stressed due to conflicts with their adolescents tend to have poor parenting practices (Steinberg, 2001).

**Need for the Study**

Girls who are juvenile delinquents are also at a higher risk for having or developing mental health, health-related, and family problems during adolescence and adulthood. Research indicates that a high number of juvenile delinquent females have been abused and sexually victimized in childhood and adolescence. In a number of instances, childhood and adolescent victimization set the stage for their entry into youth homelessness, unemployment, drug use, survival sex (and sometimes prostitution), pregnancy, and ultimately, serious criminal acts (Chesney-Linda & Sheldon, 1998). It has been reported that the many girls who have been abused may run away from home or be placed in foster care either because no one believes them or the parents do not know how to handle the situation (Bloom, 2002). They are then caught in the revolving door of running away, being arrested, and then perhaps being placed back in the home with the person who previously abused them. The Commonwealth Fund (1997) conducted a study of 6748 girls and boys grades 5 through 12 that indicated the following: one in five girls in grades 9 through 12 reported that she had been physically or sexually abused and
high school girls were more than twice as likely as high school boys to report sexual abuse in grades 9 through 12. In a study of female delinquents, Mouzakitis (1981) interviewed 60 incarcerated girls of whom 68 % reported physical abuse and 53 % reported sexual abuse. Acoca (1999) notes that the occurrence of childhood and adolescent sexual abuse increases the lifetime risk for any psychiatric disorder four-fold and increases the risk of adolescent deviant and delinquent behavior, such as stealing, battery, and substance abuse, three-fold, especially in girls. In addition, females who survive childhood abuse are at a far greater risk of committing any future violent offenses (as measured by arrest) than are males (Belknap, Winter, & Cady, 2001). Sexually abused girls who have experienced sexual intercourse often display antisocial behavior and are at risk for the development of mental health problems such as conduct disorder (Zahn-Waxler, 1993). In a Swedish birth cohort study, 30% of adult women with childhood conduct problems had a criminal record, a mental disorder, or both by age thirty (Kratzer & Hodgins, 1997).

In the earliest years of the juvenile court system, girls were frequently institutionalized for such offenses as sexual immorality or waywardness, and well into the seventies, contemporary “status offenses, such as being a runaway, often functioned as buffer charges for the court’s concern about the sexual behavior of girls (Chesney-Lind & Sheldon, 1998). Unfortunately, this preoccupation with sexual behavior has indirectly caused such real issues of adolescent females, such as abuse, and comorbid mental health issues, to be overlooked and not addressed in the same manner that it is addressed in the male population (Bloom, 2002). Although there are several theories concerning the development of juvenile delinquency, my study will specifically focus on family and peer factors associated with female juvenile delinquency and the quality of decision-making on the level positive or prosocial decision-making.
Because there is virtually no decision-making research with adolescent females done exclusively on those who are delinquent, it is important that research focus on such issues as decision-making, family environment, and peer affiliation so that mental health professionals can develop and implement prevention programs that will be of benefit to this population.

**Purpose**

Freid and Reppucci (2001) noted that there is a need to focus on factors that increase criminal decision-making of adolescents. The major purpose of my study was to examine the relationship between parent-adolescent relationships, peer group influences, and the decision-making of female juvenile delinquents. Due to the lack of such services as gender-specific programs and mental health treatment, and to the rise in the number of adolescent girls offending and reoffending, there is a need to understand and to research such skills as decision-making, which has such a big impact on the life of an adolescent. My study will recommend practices that will individualize treatment for girls, which will prove to be time- and cost-effective.

**Research Questions and Hypotheses**

- Is there a positive association between the level of decision-making demonstrated by girls who are delinquent and the level of parental involvement of their parents?

  **H1**: There is no statistically significant association between the level of decision-making by delinquent girls and the parental involvement of their parents.

- Is there a positive association between the level of decision-making demonstrated by the girls who are delinquent and level of parent-adolescent conflict?

  **H2**: There is no statistically significant association between the level of decision-making by delinquent girls and level of parent-adolescent conflict.

- Is there a positive association between the level of decision making demonstrated by girls who are delinquent and the extent to which they are influenced by their peers?

  **H3**: There is no statistically significant association between the level of decision-making and level of antisocial, neutral, or prosocial influence of their peers.
Organization of Study

An introduction has been presented in Chapter 1. A review of the literature is presented in Chapter 2 and methodology of the study will be presented in Chapter 3. The results of the study are presented in chapter 4. Chapter 5 includes a summary and discussion of the results, plus recommendations for the application and future study.
CHAPTER TWO
REVIEW OF RELATED LITERATURE

The following is primarily a review of empirical research on family factors, peer affiliation, and decision-making of delinquent girls. This chapter is divided into four sections. The first section is a brief historical background of the criminal justice system and delinquent girls. The second section deals with the etiology of delinquency. The third section focuses on research pertaining to social learning theory and delinquency, parent-adolescent relationship, peer influence and decision-making. The chapter concludes with a brief summary.

History of Delinquency

The roots of the juvenile justice court system can be traced to the 16th century European educational and religious reform movements. Due to the increase in problematic children in the states, a formal development of the juvenile justice system began in 1899. The Illinois state legislature passed a revolutionary bill regarding juvenile delinquency and authorized the establishment of the first juvenile court in Cook County (Chicago). According to Bynum and Thompson (2002), “from that beginning, similar legislation was successfully enacted in all other states, creating special legal procedures apart from the older criminal court systems for dealing with youths and children accused of violating a state law or municipal ordinance” (p. 18). Prior to this, three important events took place, which laid the foundation for the formal development of the juvenile court system:

- In 1825 in New York City, the House of Refuge was established. This provided correctional facilities for children between 7-14 after they had been convicted.
- In 1841 the city of Boston first tried probation on supervised released, a method of treating juveniles outside of the correctional institution but under supervision of the criminal court.
- In 1869, the state of Massachusetts officially established probation with supervision for juvenile law violators (p. 386).
In the late 19th century, there was a movement by a group of social reformers to initiate specialized treatment for children and youth. Platt (1969) noted, “the Child Savers, as they were called, were convinced that urban slum life exerted a corrupting influence on idle youth. They insisted that because of the tender age of delinquent youths, they could be reclaimed from a criminal life if proper steps were taken” (p. 45). According to Platt (1969), the plan that the Child Savers developed included the following principles:

• Young offenders must be segregated from the corrupting influences of adult criminals. Delinquents should be removed from their environment and imprisoned for their own good and protection.

• Reformatories should be guarded sanctuaries, combining love and guidance with firmness and restraint.

• Delinquents should be assigned to reformatories without trial and with minimal legal requirements.

• Due process is not required because reformatories are intended to reform and not to punish.

• Sentences should be indeterminate, so that inmates are encouraged to cooperate in their own reform and recalcitrant delinquents are not allowed to resume their criminal careers.

The road for girls in the juvenile justice system has not been an easy one. The ways in which societies have dealt with youth’s problem have varied tremendously over the past few centuries, and these have had a distinct impact on the lives of girls (Chesney-Lind & Shelden, 1998, p.124). It has been noted that the lives and criminal acts of delinquent girls were not important to the fathers of criminology (Bloom, 2002). However, there was a concern about their sexual conduct or waywardness, which helps to set up the juvenile justice system for girls. Girls began to be arrested for status offenses such as running away, curfew violation, incorrigibility, etc. This led to a high number of delinquent girls being placed in the system. Chesney-Lind and Pasko (2004) noted status offenses categories; during this period were essentially “buffer charges” for suspected sexuality when applied to girls. The reports of abuse
by these girls who were running away were often ignored and therefore they were often placed in detention centers and training schools as delinquents if they refused to stay home. They also reported that “in a review of a 1960’s study of girls in training school who were incarcerated for the big five (running away, incorrigibility, sexual offenses, probation violation, and truancy) the underlying vein in many of these cases was sexual misconduct by the girl delinquents” (p. 60).

Chesney-Lind and Shelden (1998) noted that there was a widely held belief that there was an increase in female criminal activity due in part to the women’s movement in the 1960’s and 1970’s. They also state that the danger of educating women and removing their domesticity and maternity would bring out the innocuous semi-criminal within all women (p.95). In a 1921 passage from the New York World magazine, Smart (1976) reiterated a quote from W.I. Thomas, which stated:

The modern age of girls and young men is intensely immoral and seemingly without the pressure of circumstances. At whose door we may lay fault, we cannot tell. It is the result of what we call the emancipation of woman, with its concomitant freedom from chaperonage, increased intimacy between the sexes in adolescence, and a more tolerant viewpoint towards all things unclean in life. This seems the only logical forbear of the present state.

This same attitude and theme still has an affect on the criminal justice system today. Girls have fewer diversion programs and treatment options than do boys and much of the research about delinquents were with males until recently (Bloom, 2002). Girls are arrested at high rates for running away, which has been linked to abuse. Often times, these girls are placed back in these same homes without the issue of abuse being addressed. More recently, the topic of female delinquency has begun to attract more attention due to the high number of girls being arrested. It is hoped that this attention will help in the creation of programs better suited for females and generate needed funding for treatment services for girls.
Gender Differences

There are varying differences in the juvenile system for girls and boys, which include treatment, court sentencing, and research. Research has also demonstrated there is a difference in the diagnosing of mental health disorders for girls and boys (Little & Little, 2003). This is important because this may help those who are currently developing mental health treatment programs for girls. For example, conduct disorder (CD) is the second highest mental health diagnosis for adolescent girls. The recent rise in the number of cases of girls being diagnosed with CD has caused some to become concerned (Little & Little, 2003). Conduct disorder is a precursor to more serious delinquent activity in girls (Acoca, 2002) and a criterion for diagnosis of delinquency. However, girls do not receive the same degree of attention for mental health treatment and research as do their male counterparts (Acoca, 2002).

This lack of attention could be due in part to a lack of research regarding prevalence of CD in adolescent females. Little and Little (2003) assert there are several reasons for this lack of research on females with CD. One reason may be a perception among mental health professionals that CD among girls is sufficiently rare. Another reason is that much of the research in anti-social behavior has come from the criminal justice system (p. 184). Most outcome studies have either concentrated solely on boys or have considered all children with CD together, without separately examining CD in girls (Robins, 1986). Due to this, the empirical findings and theories based on understanding males may not generalize to females (Goodham & Kolsdorf, 1997). Because males have much higher arrest and imprisonment rates and also commit more serious crimes than females, relevant research has tended to concentrate on males (Zoccolillo, 1993).
Gender Socialization. A second account of gender differences, not unique to the developmental account, emphasizes the differential socialization of males and females (Little & Little, 2003). Keenan and Shaw (1997) suggest that there is little difference between boys and girls in early behavior problems; as time goes by; however, developmental differences and social influence serve to either ameliorate or shape girls’ behavior problems into less aggressive forms. Hill and Maughan, (2001) assert,

socialization experiences do appear to differ in some ways between the sexes in early childhood: Mothers are more likely to encourage young girls to behave pro-socially, and they respond more positively to shy rather than to moody or intense behaviorism girls. Girls may thus be encouraged to show over– rather than under- controlled behavior, so that when problems arise, they are channeled into internalizing rather than externalizing modes of expression (pg. 191).

Webster and Stratton (1996) assert that female may be more influenced by parental psychological status than boys due to girls’ socialization in the family. Little and Little (2003) noted, “social norms lead girls to spend more time playing at home. As such, girls’ behaviors may be more affected by the behavioral display (hostile, aggressive, or depressive) of parents than the behavior of boys” (pg. 189). Due to the differences between boys and girls, mental health programs and diversion programs may be more effective and meet the needs of girls if these differences are taken into account by mental health professionals and the juvenile justice system. These differences can aid developers of gender specific programming in developing these programs.

Etiology

There is a need to now focus on precursors of female adolescent juvenile delinquency (McCord, 1991). Farrington, (1995) defines risk factors as “prior factors that increase the risk or occurrence of a negative outcome such as antisocial behavior” (p. 96). An increasing body of research points to six particularly important features of delinquent and especially incarcerated
girls: (1) family dysfunction, (2) trauma and sexual abuse, (3) mental health and substance abuse problems, (4) high-risk sexual behaviors, (5) school problems, and (6) affiliation with deviant peers (Hubbard & Pratt, 2002). Although there are several theories concerning the development of juvenile delinquency, this study will specifically focus on family and peer factors associated with juvenile delinquency and the impact of social learning and attachment on the level of severity.

One possible emotional precursor to juvenile delinquency is children’s delayed development in empathy, emotional responsiveness to others, and lack of guilt (Keenan et al., 1999). In general, girls score higher on measures of empathy than boys (Keenan & Shaw, 1997). These early factors may temporarily protect girls from engaging in early-onset antisocial behavior (Alvarez & Ollendick, 2003). However, girls’ guilt about aggressive behavior seems to decline with age (Keenan et al., 1999), perhaps helping to explain the decreasing gender distinction in conduct problems in adolescence. Among both sexes, children with conduct problems score lower on measure of empathy than non-conduct-disordered children (Cohen, Cohen, & Brooks, 1996). Girls are socialized to be “sugar and spice and all that’s nice”, while boys are socialized to be macho and aggressive.

**Family Environment**

There are many family dynamics and family environmental factors associated with juvenile delinquency. These include family stress, family conflict, harsh or inconsistent discipline, physical abuse, and inadequate supervision and monitoring of child behavior (Dodge, Lochman, Harnish, Bates, & Pettit, 1997). Stressful family dynamics may directly produce an adjustment disorder with conduct symptoms and social and cultural factors may directly maintain behavioral patterns of misconduct such as delinquency.
Research has shown that adolescent females, more so than males, tend to be more affected by the family environment (Chesney-Lind & Shelden, 1998). They generally have more responsibilities and care-taking duties than their male siblings. High level of poverty, violence, and abuse can increase the occurrence of delinquency in African American homes and girls from these broken homes tend to run away (Chesney-Lind & Shelden, 1998).

There are several bodies of research that support the idea that families of delinquent females have greater family dysfunction than do their male counterparts (e.g., Chamberlain & Moore, 2003, Kanof, 2003; Henggeler et al. 1987; Santisban et al. 1999; & Wood et al. 2002). There are also several other sets of studies of girls who were arrested and detained that reported that they come from families that had severe problems (Funk, 1999; Kim & Fendrich, 2002; and Lenssen et al., 2002).

Rodney, Tachia, and Rodney (1999) researched the home environment and its relationship to delinquency. The study consisted of 556 African American adolescent (85 % males). They reported that extended family members, parents’ time spent with the child, home discipline and family rules were significantly related to conduct disorder. Only 25 % reported a close relationship to either parent with participants being closest to their mother or female guardian.

Cummings (1994) noted that “boys’ perceptions of marital discord tended to agree much more closely with those of their mothers than did girls’ perceptions of marital discord. These differing perceptions of the threat involved in parental discord, increases the likelihood of internalizing difficulties was associated with perceptions of self-blame by girls” (pg. 176). Girls are more likely to blame themselves for their parents’ problems than are boys. They internalize this blame, which can lead to problems such as depression (Chesney-Lind, 1998).
Family Psychopathology

Disruptive and antisocial behaviors have been shown to aggregate in families (Bohman, Cloniger, Von Knorring, & Sigvardson, 1984). Parental depression may also be a risk factor for the development of juvenile delinquency in girls (Little & Little, 2003). Kahn and Hanna, (2000) note, in regard to other mental health disorders, depression in the mother along with mother negativity and father negativity and life stress, significantly predicted girls externalizing problem. Davies and Windle (1997) also reported that maternal depression, negative life events, low family intimacy, parenting impairments, and marital discord predicted females use of alcohol and participation in delinquent behavior six months later.

Parent and family risk factors for the development of Conduct Disorder (CD) include parent-psychopathology, parent criminal behavior, and ineffective, inconsistent parenting (Sholevar & Sholevar, 1995). Kazdin (1998) cites harsh and inconsistent parental punishment; poor child monitoring; low levels of parental warmth, affection, and emotional support; marital discord; family size (i.e., families with more children); presence of siblings with antisocial behavior; and socioeconomic disadvantage as risk factors contributing to the diagnosis of CD. This is important because CD has been reported as a precursor to juvenile delinquency and is also a criterion for the diagnosis of CD.

Parenting Styles

As early as the preschool years, noncompliant child behaviors are associated with particular patterns of parenting and parent-child relationships (Campbell, 1995). Studies of the early emergence of disruptive, aggressive behaviors suggest that biological propensities in the child- as indexed for example, by difficult temperament-interact with care giving environments to contribute to more and less adaptive outcomes (Little & Little, 2003). These themes of negativity and hostility in parent-child relationships, along with inconsistent, inept strategies for
control, emerge repeatedly as correlates of conduct problems throughout the childhood and adolescent years (Hill & Maughan, 2001). Correspondingly, parents who are emotionally positive and who give attention to their children's prosocial behaviors are more likely to have nonaggressive children with self-regulatory skills, suggesting that these parenting skills may serve as protective factors against the development of behavior problems (Radar, Reid, & Webster-Stratton, 2003). Parents who adjust their parenting styles in response to their teens’ changes are more likely to have psychologically healthy adolescents than parents who coercively attempt to constrain their adolescents’ extra familial involvements (Liddle & Schwartz, 2002). When this does not happen, it can create conflict between the parent and their adolescent due to the fact that this is a period when adolescents are seeking their freedom and discovering their own identity apart from their parents.

Parental discipline practices have also been reported to have an effect on the behavior of adolescents. Dishion, French and Patterson (1992) conducted a study that reported parental attention to deviant behavior, interactions in which increasingly aggressive child behavior is reinforced, inattention to prosocial behavior, coercive punishment, poor monitoring of child activities, and failure to set limits, referred to as inept discipline practices, unwittingly develop and exacerbate aggressive child behavior.

**Parental Attachment**

Several bodies of research have examined the effect of separate parental attachment on delinquency. These studies examined whether one parent had a greater influence over deterring delinquency than the other (Hindelang, 1973; Jensen & Brownfield, 1983; Johnson, Khron, & Massey, 1980). Their findings were inconclusive and inconsistent. Johnson, Khron, & Massey (1980) reported that ties to the mother were a deterrent in delinquency. Johnson, (1987) reported just the opposite. He noted that the father’s attachment played a greater role in the deterring
juvenile delinquency than did the mother’s role. Rankin and Kern (1994) analyzed data from a 1972 study of delinquency and attachment conducted with 51 boys and 48 girls with 81.6 % white and 13 % black. They tested two hypothesis: (1) as long as a child is strongly attached to one parent, strong ties to the other parent play an insignificant role in reducing delinquency further, and (2) single parent homes are not always associated with delinquency as long as the child is strongly attached to the custodial parent.

Delinquent adolescents attach to deviant peers because of a weak attachment with their parents (Kazdin, 1998). Keiley (2003) also noted the behaviors used by adolescents to gain control over disruptive, chaotic, and aversive circumstances at home carry over to their relationships with peers and teachers often resulting in academic failure and associations with deviant peers.

There is a growing body of research that supports the notion that nurturant and involved parenting decreases the risk of deviant peer affiliations during childhood and adolescence (Arbona & Powers, 2004). Blackson et al., (1996) reported a correlation between sons’ reports of negative parenting practices and their deviant peer affiliations. Zimmerman, Scheuer-Englisch, and Grossmand (1996) found that in a sample of academically at-risk adolescents, social acceptance by peers was positively related to adolescent attachment security. Vuchnich and et al., (1992) found that sixth-grade teachers’ report of boys’ poor peer relations correlated negatively with home observers’ reports of positive discipline, and correlated positively with coders ratings of parental aversive behaviors. A majority of these studies, however, were conducted with samples of boys only. For example, Blackson et al. (1996) reported a correlation between sons’ reports of negative parenting practices and their deviant peer affiliations.
Theories of Delinquency

Two major theories that have been historically linked to delinquency, but not limited to, are Social Learning Theory and Social Control Theory. They will be discussed in the next section.

Social Learning Theory

Social learning theory was developed by Akers & Burgess and was a revised form of Sutherland’s (1947) theory of differential association. According to Sutherland (1947), “the process of learning criminal behavior by association with criminal and anti-criminal patterns involves all of the mechanisms that are involved in any other learning” (p.7).

Sutherland (1947) asserts that “there are nine clear propositions of differential association which are as follows:

- Criminal behavior is learned.
- Criminal behavior is learned in an interaction with other persons in a process of communication.
- The principal part of the learning of criminal behavior occurs within intimate personal groups.
- When criminal behavior is learned, the learning includes (a) techniques of committing the crime, which are sometimes very complicated and sometimes very simple; (b) the specific direction of motives, drives, rationalizations, and attitudes.
- The specific direction of motives and drives is learned from definitions of legal codes as favorable and unfavorable.
- A person becomes delinquent because of an excess of definitions favorable to violation of law over definitions unfavorable to violation of law.
- Differential association may vary in frequency, duration, priority, and intensity.
- The process of learning criminal behavior by association with criminal and anti-criminal patterns incorporates all the mechanisms that are involved in any other learning.
• Although criminal behavior is an expression of general needs and values, it is not explained by those general needs and values since noncriminal behavior is an expression of the same needs and values.

These nine propositions laid the foundation for all of the different theoretical orientations that would later be derived from differential association.

Akers (1966; 1973; 1998; 1999) was one of the first to expand on Sutherland’s (1947) theory. Akers, however, maintained that deviance was also learned through imitation or operant conditioning. Akers (1999) “subsequently developed the differential association-reinforcement theory, most often labeling it ‘social learning’ and applying it to criminal, delinquent, and deviant behavior” (p. 62). The four areas included in Akers’ social learning theory are differential association, definitions, imitation of models, and differential reinforcement. All four areas can either serve to inhibit or encourage delinquency.  Akers (1998) noted the following:

The probability that persons will engage in criminal and deviant behavior is increased and the probability of their conforming to the norm is decreased when they differentially associate with others who commit criminal behavior and espouse definitions favorable to it, are relatively more exposed in-person or symbolically to salient criminal/deviant models, decline it as desirable or justified in a situation discriminative for the behavior, and have received in the past and anticipate in the current or future situation relatively greater reward than punishment for the behavior (p. 99).

Social Control Theory

Travis Hirschi developed control theory, which is one of the oldest and most prominent theory of delinquency. “Hirshi, (1969) posits that the strength of the relationship or social bonds is established in childhood through a natural attachment to peers, parent, teachers, and others who demonstrate the expected norms of societal behavior. If this social bond is firmly intact for an individual, then there will be no patterns of delinquent behavior. Segal, Walsh, and Senna (2001) note, there are four major elements of Hirshi’s argument. They are (1) all people have the potential to commit crimes because they are pleasurable; (2) people are kept in check by their
social bonds and attachment to society; and (3) weakened social bonds free people to engage in antisocial but personally desirable behaviors (p. 123).

One important aspect of Social Control theory is attachment or social bonds. Attachment or social bonds provides a unique framework for considering the development of conduct disorder and delinquency in that it offers a macroanalytic, developmental and organizational perspective, incorporating behavioral, cognitive and affective aspects of the developing child’s development (Hill & Maughan, 2003). This experience sets the foundation for adolescent psychological development in regards to family and peer associations. However, the time spent with parents in the early years can serve to form positive attachments, which lay the foundation for healthy psychological development and prosocial behavior in girls. Warr (1993) asserted among adolescents with strong bonds to their parents, the potential loss of parental approval or affection may be sufficient to deter delinquency even when the pressure from peers is intense.

**Parent-Adolescent Relationships**

Hall (1904) described adolescence as a time of storm and stress for both the adolescent and their parents. Hall (1904) noted that adolescence is a time when “the wisdom and advice of parents and teachers is overtopped, and in rude natures they may be met by blank contradiction” (p. 79). He asserted that this was due in part to “parents who still think their adolescents are mere children, and tighten the rein when need to loosen it” (Arnette, 1999, p.384). This can be difficult for an adolescent, who is already going through a period that is defined by a search for individuation and autonomy. Arnette (1999) defines these three key elements of storm and stress:

- Conflict with parents. Adolescents have a tendency to be rebellious and to resist adult authority. In particular, adolescence is a time when conflict with parents is especially high.
• Mood disruptions. Adolescents tend to be more volatile emotionally than either children or adults. They experience more extremes of mood and more swings of mood from one extreme to another. They also experience more frequent episodes of depressed mood.

• Risk Behavior. Adolescents have higher rates of reckless, norm-breaking, and antisocial behavior than either children or adults. Adolescents are more likely to cause disruptions of the social order and to engage in behavior that carries the potential for harm to themselves and/or the people around them.

For the purpose of this study, research concerning parent-adolescent conflict and risk behavior, more specifically, delinquency of girls will be discussed in the following sections.

Lawrence Steinberg (2001) summarized 25 years of research on parent-adolescent relationships. Steinberg attempted to answer two questions: (1) What defined a normal family to include parental conflict, and (2) how does this relationship affect the development of the adolescent. Steinberg (2001) goes on to state:

the answer to the first question depends on what is meant by conflict and more importantly, from whom one gathers data. There is a need for a new perspective on the family, one that states that parents and adolescents bring to their relationship with each other. With regard to the second question, it is argued that there is enough evidence to conclude that adolescents benefit from having parents who are authoritative; warm, firm, and accepting of their needs for psychological autonomy (p. 11).

He also stated that because of these two facts it would be beneficial for parents to be educated about adolescence from a holistic point of view which would include several organizations such community agencies, mental health, healthcare care organizations.

**Parental-Adolescent conflict**

Parental and adolescent conflict has been shown to be an important factor in the development of juvenile delinquency. Although researchers have offered varying explanations for underlying processes it has been hypothesized that conflict transforms the unilateral parent-child relationships of middle childhood to the more material relations of late adolescence and young adulthood (Smetana & Gaines, 1999). Research has indicated that aversive adolescent relationships and in particular high levels of adolescent-parent conflict predict a range of
psychosocial problems during adolescence including drug and alcohol abuse, delinquency, and premarital sexual relations (Smetana, Abernathy, & Harris, 2000).

There is a growing body of research on parent-adolescent conflict and its effect on adolescent development, delinquency (Smetana & Gaines, 1999; Arbona & Powers, 2004; Conger & Ge, 1999). McGue, et al., (2005) studied 1,330 eleven-year-old twins who completed a self-report measure of conflict and aspects of warmth in the parent-child relationships. Three years later, 1177 of the twins completed the study. They reported that between the ages of 11-14, parental warmth decreased, whereas parental conflict increased significantly. They also noted that the changes were significantly greater for girls than boys. The parent-child relationship was assessed using the Parent Environment Questionnaire (PEQ) at both the intake assessment and follow up assessment. Their overall finding was that gender moderated changes over time for the PEQ scales for conflict, regard for parent and regard for child.

Allison and Shultz (2004) reported similar results when they studied a group of 356 adolescents in grades 6, 7, and 8. Using the Issues Checklist (Printz, 1979), they reported that conflict increased between grades six through eight and peaking at age seven. They also noted that “there was considerable variation in both the frequency and intensity of conflict across specific issues” (p. 101). Allison and Shultz (2004) noted that it is important to study early adolescence which had been previously associated with relational changes in the family including heightened levels of conflict between young adolescent and their parents. Their sample consisted of 165 males and 192 females.

Smetana and Gaines (1999) studied 95 African American adolescents between 11 and 14 year olds and their parents. They wanted to assess the level of parent-adolescent conflict using the Issues checklist (Printz et al., 1979). Parents were also assessed using the Children’s Report
of Parent Behavior Inventory (Schafer, 1965). Family decision-making and attachment to parents were also assessed. They reported that parent-adolescent conflicts were relatively high but more intense for girls. They also noted that the number of conflicts and adolescent concession to parent’s demands were predicted by their relationship with both parents and their demographic background.

Synder, Cramer, Frank, and Patterson (2005) reported that ineffective maternal discipline and hostile attribution predicted growth in child conduct problems both at home and at school. Their study consisted of 134 boys and 132 girls from a community sample. The Child Behavior Checklist (Achenback, 1991) was used to assess child behavior. Teachers assessed child behavior using the teacher report of child behavior (Achenback, 1991). Parent child interaction was coded using the Family Peer Process Code (FPP, Stubbs, Crosby, Forgath, & Capaldi, 1998). None of these studies researched girls exclusively.

**Parental Involvement**

Although adolescence is a period when adolescents began to form stronger bonds with their friends, while disengaging with their parents, this is also an important time when they began to make important life decisions regarding their future and transition into adulthood. Studies have shown that parents who are involved in their children’s life early on tend to continue these types of relationships during adolescence (Lerner & Steinberg, 2004). Flouri and Buchanan (2002) reported that parent involvement during adolescence predicted closeness during adolescence, with strong links between early father involvement and closeness to father at age 16 for girls.

**Communication**

One aspect of this relationship is the amount of communication that exists between parent and their adolescent. Several studies have predicted that communication and poor parenting
practices predicted conduct problems (Cole, Dodge; Daddles, Sanders, Morrison, & Rebgetz, 1992). There are other similar studies that have researched the parenting environment, which included the amount of communication that exists in the families. Hill and Bush (2001) examined 94 boys and girls to determine if parent environment was a predictor of conduct problems. They assessed parenting environment using the Child Behavior Report of Parenting Behavior Inventory (Shafer, 1965). Parent environment consisted of parental discipline and the affective relationship. Family communication was also assessed using the expressiveness scale. Hill and Bush (2001) reported that parenting and family interaction patterns were associated with children’s’ anxious symptoms and conduct problems. There were also differences in how girls related to their mothers and fathers with girls showing a strong relationship to their mothers.

Caughlin and Ramey (2005) studied 57 adolescents, ages 13 to 16 to determine the effect of the demand/withdraw patterns of communications in adolescent dyads. The overall goal of this study was to determine if and when the demand/withdraw interaction occurred and how this affected the communication between the parent and adolescent. Their findings indicated that when parents make demands from adolescents they tend to withdraw and at higher level than when the communication is vice versa. Two measures were used to assess the demand withdraw behaviors of the parents and their adolescents. The first was through the use of outsider ratings and the second was through post conversation reports of demand and withdraw. Their findings are important because adolescents tend to withdraw during this period in an attempt to gain their freedom and develop autonomy. Examining the communication styles of parents and adolescents is important because this may affect who they consult when faced with decision-making.
Parent-Child Relationships and Delinquency

Adolescent delinquent girls are all affected differently by parental-adolescent conflicts, and degree of parental involvement. If delinquent girls and their parents have a conflictual relationship they are more likely to internalize these conflicts which can lead to externalizing behaviors and mental health issues such as depression (McCabe, Lansing, Garland, & Hough (2002). Delinquent girls have been shown to turn to their peers for support when they do not feel supported by their parents or their parents are not involved in their life (Maughan & Hill, 2003). Parent-child relationships have been studied in great detail (for review see Connor, 2002; Steinberg 2001). What is important now is to identify specific aspects of these relationships that may promote or deter criminal decision making of delinquent girls.

Peer Influence

It is widely known that adolescence is a time when peer friendships become more important as they seek autonomy and freedom from their parents. Girls’ friendships have been shown to be more important to them than they are to boys and they tend to have more friends than do boys (McCarthy, Felmlee, & Hagan, 2004). Past research has often tried to clarify whether parents influence peer association or whether peers influence each other regardless of the parental relationship (Collins & Laursen, 2004). Adolescents often tend to associate with peers who have similar goals and interests whether they are positive or negative.

Peer affiliations and influence have been shown to contribute to delinquent behavior in girls. Adolescents tend to seek support from peers when parental support is absent (Baumrind, 1991). Gilligan (1982) conducted research that revealed girls’ sense of identity is developed through and because of their relationships. Same-sex relationships are of more importance to girls than they are to boys. Due to this, adolescent girls go to great lengths to conform to the norms of a peer group to which they wish to belong (Lecroy & Daly, 2001). McCarthy,
Felmlee, and Hagan (2004) assert that youth from both genders value the support and intimacy that their friendships provide. They go on to note that females consistently report that they spend more time with friends, expect and receive more kindness, commitment and empathy from them, and have a more open, intimate and disclosing relationships (p. 809). In their study of 563 girls in grades nine through twelve they assessed the level of closeness and intimacy in these relationships. They report that the relationship between female dominated friendship networks and presence of property crime was negative and significant. This supports the belief that if a girl has female dominated friendships, she is less likely to engage in criminal behavior. Relationships were strongest for girls who were in school and weakest for those who lived on the streets. Their findings implicated that peer influence was not as strong for girls as it was for boys. However, this raises the question of whether girls whose primary network consists of boys are more likely to engage in criminal decision-making.

Girls may be more influenced by deviant friends and peers than boys because they value social relationships more than boys and because their friendships are characterized by more intimacy and closeness than boys (Maughan and Hill, 2003). Therefore peer association for delinquent females may play an important role in predicting delinquency if the adolescent associates with delinquent peers.

Adolescent girls tend to mature at a quicker rate than do males. Mature delinquent girls often associate with older peers and have older romantic partners. This exposes these girls to alcohol, drugs, and the club scene, which are some areas that they would not have otherwise been as readily available to them. Research has shown that there is a link between mature and developed delinquent females and their association with delinquent males. Caspi et al., (1987)
reported that early maturing girls experience higher levels of delinquency in mixed sex schools than they do in all-female schools where exposure to males was absent.

Agnew and Brezina (1997) also reported that girls who associate with male friends are at a greater risk of delinquency than are females who do not. Theorists have speculated that these delinquent girls represent a key link in the intergenerational transmission of male criminality, as they often associate romantically with antisocial men, become teen mothers, and show poor parenting abilities that increase the risk for disruptive behavioral development among their offspring (Capaldi, Kim, & Shortt, 2004). Silverhorn and Frick, (1999) noted that there may be important gender differences in the development of disruptive behavior problems, leading investigators to argue that better attempts are needed to understand the early nature and course of these problems among girls.

**Decision-Making**

**Adolescent Decision-Making**

Some have argued that adolescents have the decision-making competence of adults (Steinberg & Scott, 2003) and that they should be held accountable for their actions in the same manner that an adult is. Decision-making can be defined as the process of making choices among possible alternatives. Gardner and Steinberg (2005) noted,

“It is assumed that adolescents have more opportunities to engage in risky taking behaviors with peers because this is a period when they tend to spend more time with their peers. Further support for the heightened peer effects on risky behavior during adolescence comes from the additional finding on the risky-shift. Although a number of researchers have found that risk-taking tendencies are greater when individuals are in groups than when along, several studies have found the opposite to be true” (p. 328). Evans, Brown, and Killian, (2002) assert that
adolescent decision-making skills, are complicated by many factors such as family structure, socioeconomic class, religiosity, and race/ethnicity.

**Decision-Making Competence**

There are several studies and reviews on the development of adolescent decision-making. Mann, Harmoni, and Power (1989) discussed the development of competence in decision-making of adolescents. Their review focused on cognitive aspects of decision-making and nine indicators of competence: choice; comprehension; creativity; compromise; consequentiality; connectedness; credibility; consistency; and commitment. They reported that by the age of 15 many adolescents show a reliable level of competence in metacognitive understanding. They also noted “barriers to achieving competence in decision-making during adolescence include attitudinal constraints (e.g. beliefs about the proper age for making decision), peer group pressures to conformity, breakdowns in family structure and functioning, and restricted legal rights to make important person decisions” (p. 265).

In a similar study, Ormond, Luszcz, Mann, and Beswick (1991) examined early and middle adolescents’ metacognitive knowledge of decision-making. They reported that middle adolescents have a high understanding of what is involved in decision-making. Correlations were found between metacognitive knowledge of decision-making, decision-making style and performance. Their sample consisted of 43 adolescents and was assessed using the Flinders Adolescent Decision-Making Questionnaire. On the contrary, Byrnes (2003) posited that although the literature on adolescent decision-making is too sparse to be conclusive at present, there were some deficiencies with the decision-making of adolescents in comparison to adults. He did find that adolescents’ decision-making competence was less than that of adults in certain areas such as advice seeking, evaluation processes, adaptive goal setting, and learning but similar in areas such as knowledge of options and responses to certain moderating factors.
Criminal Decision-Making

Fried and Reppucci (2001) researched the criminal decision-making of 56 adolescents between the ages of 13 to 18. They examined the role of several psychosocial factors such as temporal perspective, peer influence, and risk perception using the Criminal Decision-making Questionnaire, which they designed for this study, Berndt’s (1979) Vignettes of Peer Influence, Benthin, Slovic, and Severson’s (1993) Scale of Risk Perception. They reported that youths who were detained were more likely to think of future-oriented consequences of engaging in the depicted delinquent act and less likely to anticipate pressure from their friends than youths who were not detained. They also reported that criminal responsibility and culpability were predicted by age and ethnicity.

Research on adolescents and the influence of peers on decision-making is sparse. Gardner and Steinberg (2005) noted that there was only one prior study that examined the effect of peer pressure on orientation towards risk. In their study of 306 adolescents and young adults, they wanted to determine if peers had an effect on the decision-making of adolescents in comparison to adults. Risk-taking was assessed with a game called Chicken, a game that assesses risk-taking behavior in the present moment (Sheldrick, 2004). Risk preference was assessed using the modified version of the Benthin Risk Perception Measure (BRPM; Benthin, Slovic, and Severson, 1993). Risky decision-making was assessed via the Youth Decision-Making Questionnaire (YDMQ; Ford, Wentzel, Wood, Stevens, and Siesfeld, 1990). They reported the following findings: (a) that risk taking and risky decision-making decreased with age; (b) participants took more risks, focused more on the benefits than the cost of the risky behavior, and made riskier decisions when in peer groups than when alone; and (c) peer effects on risk taking and risky decision-making were stronger among adolescent and youths than adults” (p. 625).
The authors feel this demonstrates that adolescents are more likely to engage in risky behavior when in groups than when alone and that they make more risky decisions than do adults.

Several studies have examined the effects of family influences/processes but very few examined decision-making and the effects of the parent-adolescent relationship and peer influence. Brown and Mann (1990) examined the relationship between family structural and process variables (cohesion, parent-adolescent communication, parental conflict resolution and adolescent family decision-making. High family cohesion, good adolescent communication and sound parental conflict resolution were all related to sound decision-making in adolescents. Ferrari and Olivetti (1993) examined the relationship between adolescent females’ perception of parents’ authority and their own tendency toward decisional procrastination. Parenting style was found to influence adolescent decision-making ability. Authoritarian style was a predictor of indecision tendencies of the daughters. Jacobs and Bennett (1993) researched the decision-making of adolescent in one and two parent homes. They were interested in finding out who the adolescent would seek out for support when two parents were involved.

**Summary**

There is now, more than ever a need for prevention, intervention and treatment of delinquent adolescent girls. Once engaged in the juvenile justice system, adolescents and their parents have not been very successful in extracting themselves from the continuing cycles of probation and incarceration of the adolescent (Kazdin, 1993; Bloom 2002). As previously discussed, adolescent girls who are at-risk for delinquency have poor outcomes (Cheney-Lind & Shelden, 1998; Mouzakitis, 1981; Belknap, Winter, & Cady, 2001). Few studies conducted have researched girls exclusively. There are also more services for delinquent males with psychological issues (Bloom, 2002).
In reviewing the literature on delinquent adolescent females it was noted that delinquent females are more affected by factors such as environment and parenting style (Funk, 1999; Kim & Fendrich, 2002; Lenssen et al., 2002, & Loper) peer association (Maughan & Hill, 2003) and parent-adolescent relationship (Smetana & Gaines, 1999; Laursen, 1995). However, there is a lack of research that has exclusively examined factors related to criminal decision-making in adolescent females. This study aims to fill some of those gaps to better inform treatment planning and program development in hopes to reduce the number of girls being committed to the juvenile justice system.
CHAPTER 3
METHODOLOGY

Statement of Purpose

Freid and Reppucci (2001) noted that there is a need to focus on factors that increase criminal decision making of adolescents. The major purpose of this study will be to examine the relationship of parent-adolescent relationship, peer group influence, and their moderating effect on the criminal decision making of female juvenile delinquents. Due to the lack of services, the rise in offending and reoffending, there is a need to understand and research skills such as decision making, which has such a big impact on the life of an adolescent. It is hoped that this study will inform practice that will individualize treatment for girls, which will prove to be time and cost effective.

Research Design

This cross-sectional study will use data collected from girls who are delinquent and currently incarcerated. They will be asked to complete a battery of surveys. The youths will be surveyed using the following instruments: the Parent Environment Questionnaire (PEQ) (Elkins, McGue, & Iacono, 1997), the Decision-Making Questionnaire (DMQ) (Polk & Evans, 1999), and Berndt’s Vignettes of Peer Influence (BVPI) (Berndt, 1979).

Participants

Girls from a residential facility in Georgia were recruited for this study. A nonrandomized convenience sample will be obtained within a three-week period. All of the girls have been adjudicated by the court to the Macon YDC program and will be asked to complete the surveys. Although participation is anonymous, age and race will be requested from each participant. Tentatively, 125 participants at the Macon Youth Detention Campus will be administered the assessments. Although several facilities throughout Alabama, Georgia, Florida, North Carolina,
South Carolina were called to receive permission to use the girls at their site in this study, only Macon YDC, through the Georgia’s Commissioners Office, gave permission to use their facilities. Macon YDC is the largest and the only girl facility available in Georgia.

**Research Variables**

The variables in this study will be measured by three questionnaires and demographic information. The independent variables include (1) Parental-Adolescent Conflict, (2) Parental Involvement, and (3) Peer-Influence. The measured variables used to quantify the independent variables include (1) Parental-Adolescent Conflict subscale of the PEQ, (2) Parental Involvement subscale of the PEQ, and (3) Peer Influence subscale of the BVPI. The dependent variable is decision-making, which is measured by the Decision-Making Questionnaire.

**Data Collection Procedure**

Upon approval from the Institute of Research Board (IRB), girls who are delinquent and have been adjudicated by the office of the State Attorney and local law enforcement who reside at the residential facility will be asked by the researcher to complete a set of surveys. The study participants will be given information explaining the study and the purpose of the study. They will be informed of potential risks and benefits as a result of their participation in this study. Prior to administering the surveys the participants will be asked to sign a consent form. Since the participants are wards of the state, parental consent will not be required in order for the girls to participate in the study. The participants will also be advised that their participation in the study is voluntary and will not have any impact on their status in the program if they chose not to participate.

All data will be collected solely by the researcher, with assistance from the residential facility staff for order. Due to confidentiality, the staff will not administer or have any involvement in the administration of the surveys. The questions will be read aloud to assist those
participants who have difficulty reading or comprehending the questions. Each participant will have a packet that contains the PEQ (Elkins, McGue, & Iacono, 1997), the DMS (Polk & Evans, 1999), BVPI (Berndt, 1979).

Instrumentation

In this section, I provide information regarding the instruments included in my study; Parent Environment Questionnaire, Decision-Making Scale, Berndt’s Vignettes of Peer Influence.

Parent Environment Questionnaire (PEQ)

The PEQ is a 50-item self report inventory developed by Elkins, McGue, and Iacono, (1997). The scale was normed using 672 individual twins who were clients between 1990 and 1994. According to Elkins et al., (1979), the Minnesota Twin Family Study is a longitudinal study that was developed to identify genetic and environmental factors that influence the development of substance abuse and associated psychological disorders (p. 352). The sample was randomized and split into two groups to correct for interdependence of observations. The twins completed two sets of ratings for each parent.

The inventory measures conflict, parent involvement, regard for parent, regard for child and structure and responses are based on a four point scale. The parent conflict and parent involvement subscale consist of 12 items each. The involvement scale assesses the level of communication between the parent and adolescent and the level of conflict between the parents and their adolescent. Reliability for conflict was .82, for involvement .74, parental regards .75, and regard for child.

Elkins et al., (1997) noted:

During the PEQ's development, the results of a factor analysis by Auke Tellegen on data from 272 parents were used to reduce the PEQ's length from 93 to 50 items per relationship. The 50-item version was subsequently used for the female intake and first
male follow-up assessments. Although all male intake twins and parents received the 93-item version, in the interest of comparability between studies, only responses to the 50 items currently being used in the female intake and male follow-up studies were submitted to a series of new principal components factor analyses with varimax rotation. The goal of these analyses was to identify the factor structure which best characterized the data, in order to apply the same set of factors to data from different reporters (p. 352).

Decision-Making Questionnaire (DMQ)

Polk and Evans (1999) developed the DMS for use in a nationally funded study, which evaluated youth prevention projects. A group of researchers developed this scale based on current research and the adolescent decision-making literature (Evans et. al, 2002). The items were standardized using a population of youth involved in the youth prevention study. An open-ended question at the beginning of the scale asks the respondents to state a recent major decision and rate the decision based on the questions in the scale. Items and subscales were developed from the decision-making constructs, which consisted of evaluating decisions, decision making efficacy, generating options, and considering consequences (Evans et al., 2002). These items measure the quality of decision-making of adolescents based on these subscales.

This instrument consists of 17 questions and contains 3 subscales of decision-making. To assess the internal reliability of the decision-making scale, a Cronbach’s alpha analysis was conducted using the current sample. The analysis revealed an alpha level of .80. The first subscale is generating options and considering choices. The Cronbach’s reliability analysis on the eight-item subscale revealed an alpha level of .71. The second subscale was evaluation of decision-making. This subscale consisted of four items and had a Cronbach’s alpha of .74. The third subscale was decision-making efficacy and it had a Cronbach’s alpha of .67.

Berndt’s Vignettes of Peer Influence (BVPI)

The BVPI contains 30 situations in which there are scenarios given which are prosocial, antisocial, or neutral, and the participants determine what their course of action would be. Some
of the questions are one sentence, while some are longer. The study was randomized with a sample of 9000 children and adolescents between the ages of 9 and 18. The students were selected from schools in a city of middle class residents. The participants were first asked to evaluate 10 antisocial actions, such as taking candy from a store without paying. They responded on a 4-point scale ranging from not bad at all to very bad.

The assessment measures three types of behavior: antisocial, prosocial, and neutral. According to Berndt (1979), there were 10 items for each subscale. The antisocial subscale consisted of destruction of property, stealing, trespassing, and cheating. Neutral items consisted of choices about sports, hobbies, entertainment, and places to eat. The prosocial scale consisted of doing community service and helping others. The internal consistency of the measures was assessed with split-half reliability coefficients, corrected by the Spearman-Brown formula. Average reliability was .81 for antisocial conformity, .61 for neutral conformity, and .07 for prosocial conformity and should be interpreted with caution.

Support for the BVPI has been established by Freid and Repucci (2001). They investigated the criminal culpability of delinquent adolescents and decision-making. The Cronbach’s alpha for their study was .74 for antisocial behavior.

**Research Questions Hypotheses**

- Is there a positive association between the level of decision-making demonstrated by girls who are delinquent and the level of parental involvement of their parents?

  H1: There is no statistically significant association between the level of decision-making and the parental involvement of the girls who are delinquent and their parents.

- Is there a positive association between the level of decision-making demonstrated by the girls who are delinquent and level of parent-adolescent conflict?

  H2: There is no statistically significant association between the level of decision-making and level of parent-adolescent conflict.
• Is there a positive association between the level of decision making demonstrated by girls who are delinquent and the extent to which they are influenced by their peers?

H3: There is no statistically significant association between the level of decision-making and level of antisocial, neutral, or prosocial influence of their peers

Data Analysis

Multiple regression analyses will be used to assess the contribution of three variables to predicting girls who are delinquent quality of decision-making. The three variables are as follows: Parental involvement, parental conflict, and peer influence. All three hypotheses will be analyzed via multiple regression and reliability estimates will be determined. The analysis necessary for answering the questions and hypotheses posed for this study, the three scales used in this study (PEQ, DMQ, BPVI) were submitted to reliability analysis to confirm subscales for this population. To determine if there are relationships between the predictor variables a Person R Correlation will be executed in SPSS.

In order to assess the capacity of the data to be in line with the normality assumptions of multiple regressions, the data will be subjected to tests of skewness and kurtosis. Results of these analyses will indicate that the assumptions for multivariate normalcy will be met.

The results and implications from this study must be assessed within the limitations of this study. This study is exclusively females due to the fact that very little research has been conducted specifically on girls’ decision-making as it relates to parent-adolescent relationship and peer influence. However, the theories used in this research have been generalized to females. Also, due to the fact that there is limited access to girls who are incarcerated or delinquent, the population sample will be relatively limited.
CHAPTER 4
RESULTS

The purpose of this study was to assess the influences the parent-adolescent relationship and peer influence variables have on the quality of decision making of adolescent girls who are delinquent. My study sought to determine the relationship of the level of decision making of girls who are delinquent and the following variables: (a) level of parental conflict, (b) level of parental involvement, and (c) peer influence.

In this chapter, the outcomes related to data collection, data analysis, and results are discussed. Descriptive data are provided where possible. Reliability coefficients for the Parent Environment Questionnaire (PEQ), Decision Making Questionnaire (DMQ), and Berdnt’s Vignettes of Peer Influence (BVPI) are reported. Finally, outcome analyses of the research hypotheses posed in this study are discussed.

Data Collection and Response Rate

Participation was voluntary and all participants were not required to provide informed consent because they are wards of the state. They were fully informed that their lack of participation would not affect their status in the program. A total of 124 girls were asked to complete the surveys and 22 declined to participate. The girls filled out the surveys at their own pace but the surveys were read aloud. It took participants approximately 45 minutes to complete the instruments and the study was conducted in accordance with ethical guidelines. A minimum criterion of 97 completed packets was required to achieve the power to detect statistical significance in analysis of the data.

The final sample consisted of 102 female adolescents from the Macon Youth Detention Campus with a mean age of 16.09 (SD = 1.29). The sample was primarily African American,
59.8 (N = 61), followed by Caucasian, 22.6% (N = 23), Latino 8.8% (N = 9), and Other, 8.8% (N = 9) (Table 4-2).

**Measures Data**

Tables 4-1 and 4-2 describe the age and ethnic background of the study participants. Prior to commencing the analysis necessary for answering the questions and hypotheses posed for this study, the three scales used in this study (PEQ, DMQ, BPVI) were submitted to reliability analysis to confirm subscales for this population. While it was presumed the scales and subscales would confirm previously identified reliability statistics, it was also acknowledged that validity and reliability are situation and person specific and a scale might be valid and reliable for one group of subjects but might not be valid and reliable for another.

**Decision Making Questionnaire (DMQ)**

The DMQ (Polk & Evans, 1999) is a 17-item measure of decision-making. This measure contains items that evaluate decision-making, decision-making efficacy, generating options, and considering consequences. Each item is rated according to the extent that it is used by the participant in making an important decision concerning a recent problem or issue in their life. The following designations apply: a rating of "1" represents that the decision making item is "not true for me"; a rating of "3" represents that the decision-making item is "sort of true for me"; and, a rating of "5" represents that the decision-making item is “true for me." The mean score summed score for decision-making was 27.05 and with a standard deviation of 5.01. The maximum score was 85 with a minimum score of 17.

**Parent Environment Questionnaire (PEQ)**

The Parent Environment Questionnaire (1997) is a 50-item measure of the relationship between parents and their children. Participants rated aspects of their relationships on a 5-point likert type scale ranging from "1" indicating "definitely true" to "4" indicating "definitely false".
This item contains four subscales that measure parental involvement, parental conflict, regard for parent, regard for child, and structure. The participants are asked to respond to the questions based on their relationship with their parents separately. For the purpose of this study, parental involvement and parental conflict were the only subscales analyzed for this study. Due to low reliability of parent regard for child and child regard for parent in a previous study, the parental involvement and conflict subscale were the only subscales analyzed for the study. The mean for parental conflict was 18.87 (SD 5.03) for the responses concerning their mothers and 16.43 (SD 5.53) for their fathers. The mean score for parental involvement was 20.68 (SD 3.78) for the responses concerning their mothers and 18.51 (SD 4.42) for their fathers.

**Berdnt’s Peer Influence Vignettes (BPIV)**

The BPIV is a 30-item measure of antisocial, neutral, or prosocial peer conformity. The questions are based on a likert type scale that ranges from “not certain” to “absolutely certain”. The antisocial subscale contains 9 questions, which measure the degree of negative peer influence. The maximum score is 54 with a minimum score of 9. The mean for antisocial conformity was 32.59, with a standard deviation of 5.85. The prosocial subscale contains 9 questions with a maximum score of 54 and minimum score of 9. The mean for prosocial conformity was 24.90, with a mean of 5.21. The neutral subscale contains 8 questions with a maximum score of 48 and minimum score of 8. The mean for neutral conformity was 22.14, with a standard deviation of 5.92.

**Reliability Estimates for the DMQ, PEQ, and BPIV**

Internal consistency for three measures was calculated. Cronbach’s alpha was utilized to evaluate the scale items on the three instruments. The formula used was
Coefficient alpha values range from 0 to 1, with 1 being a perfectly consistent measure.

Internal consistency for each subscale of Berdnět’s Vignettes of Peer Influence was calculated. The value achieved for Antisocial Behavior was .71. This value is similar to the previously reported alpha of .74. This finding indicates that approximately 71% of the variance on the subscale was attributed to true score variance. The value achieved for peer influence was .64 indicating that approximately 64% of the variance on the subscale was attributed to true score variance. This value is close to the previously reported value of .71.

Internal consistency for the DMQ was calculated. DMQ scores in the present study yielded a Cronbach’s alpha = .68. This was also comparable to reliability statistics reported in the original study and thus supported those findings of .71. This finding indicates that approximately 68% of the total score variance was from true score variance. Also indicated is the consistency of participants' responses across items on the DMQ.

Internal consistency analyses were conducted for the PEQ subscales of parent conflict and parent involvement in the current study. For both subscales, participants completed a set of answers for both their mother and their father. For the parent conflict subscale, analyses revealed a Cronbach’s alpha = .90 when participants filled out the inventory for their fathers and alpha = .85 when filling out the inventory for their mothers. For the parent involvement subscale, alpha = .78 when participants filled out the inventory for their mothers and alpha = .85 when participants filled out the inventory for their fathers. This supported the reliability findings in previous studies of .75 and .71.
Preliminary Analyses

Pearson Product Moment correlations, using a criterion level of .05 (2-tailed), were computed between decision-making and each of the predictor variables in an attempt to confirm that the relationships were in the predicted directions.

For parental involvement, neither mothers’ nor fathers’ involvement was significantly correlated with decision-making. Additionally, for parental conflict, neither mothers’ nor fathers’ involvement was significantly correlated with decision-making.

Finally, when looking at peer influence, peer neutral influence was significantly positively correlated with decision-making (r = 0.20, \( P \leq .04 \)), which was in the predicted directions. On the other hand, peer pro-social influence and antisocial influence were not significantly correlated decision making, which was not in the predicted directions. See Table 4-7.

Regression Analyses

In order to assess the capacity of the data to be in line with the normality assumptions of multiple regressions, the data was subjected to a test of skewness and kurtosis. Results of these analyses indicate that the assumptions for multivariate normalcy were met. All skewness and kurtosis estimates for the variables fell between 1 and –1 except for the parent conflict subscale filled out for fathers, which had a kurtosis value of 1.578 and skewness of 1.348.

Hypothesis 1

Linear regression analyses were conducted to determine if the predictor variable (parental involvement) would influence delinquent adolescent females’ ratings on the criterion variable (decision-making). Separate regression analyses were conducted for mother and fathers parental involvement ratings.

Hypothesis one stated there is no statistically significant association between an adolescent’s level of decision-making and the reported level of parental involvement by the
adolescent. There was not a significant association for either father involvement $F(1, 102) = 1.17, p < .28 (R^2 = .012)$ nor for mother involvement $F(1, 102) = 0.26, p < .26 (R^2 = .003)$ concerning quality of decision making. The standardized beta coefficient for the parental involvement for the father ($\beta = 0.108$) was in the positive direction, but was not significant $t(102) = 1.08, p < .282$. The standardized beta coefficient ($\beta = 0.120$) for parental influence for the mother, $t(102) = -.512, p < .61$, was in the negative direction and also was not significant. These findings indicated that there is not sufficient evidence to conclude that there is a relationship between parental involvement and level of decision-making. See table 4-3 for this analysis.

**Hypothesis 2**

Linear regression analyses were conducted to determine if the predictor variable (parental conflict) would influence delinquent adolescent females’ ratings of the criterion variable (decision making). Separate regression analyses were conducted for mother and fathers ratings.

Hypothesis two stated there is no statistically significant association between an adolescent’s level of decision-making and the reported level of parental conflicts between the parents and their adolescents. Their was not a significant association for either father conflict $F(1, 102) = 2.60, p < .11 (R^2 = .025)$ or mother conflict $F(1, 102) = 3.24, p < .08 (R^2 = .031)$ concerning quality of decision making. The standardized beta coefficient for the parental conflict for the father ($\beta = 0.159$) was in the positive direction, but was not significant $t(102) = 1.61, p < .110$. The standardized beta coefficient ($\beta = 0.177$) for parental conflict for the mother, $t(102) = 1.80, p < .08$, was also in the positive direction and was not significant. These findings indicated that there is not sufficient evidence to conclude that there is a relationship between parental conflict and quality decision-making. See table 4-4 for this analysis.
Hypothesis 3

Linear regression analyses were conducted to determine if the predictor variable (peer influence) would influence delinquent adolescent females’ ratings of the criterion variable (decision making). Separate regression analyses were conducted for the three types of peer influence (pro-social, neutral, and antisocial).

Hypothesis three stated there is no statistically significant association between an adolescent’s level of decision-making and influence of their peers. There was a significant association between Neutral peer influence and quality of decision making, $F(1, 102) = 4.35, p < .04 \ (R^2 = .042)$. Both pro-social peer influence, $F(1, 102) = 0.84, p < .36 \ (R^2 = .008)$ and antisocial peer influence, $F(1, 102) = 0.54, p < .46 \ (R^2 = .005)$, were not significant predictors of decision making. The standardized beta coefficient for neutral peer influence ($\beta = 0.204$) was significant, $t(102) = 2.09, p < .04$ and in the positive direction. The standardized beta coefficient for pro-social peer influence ($\beta = -0.092$) was not significant, $t(102) = -0.921, p < .36$ and in the negative direction. Similarly, the standardized beta coefficient for antisocial peer influence ($\beta = 0.074$) was not significant, $t(102) = 0.736, p < .64$ but was in the positive direction. Both the findings for pro-social and antisocial peer influence supported the given hypotheses. The null hypothesis for neutral peer influence was rejected. See table 4-5 for this analysis.

<table>
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<th>Age</th>
<th>Frequency</th>
<th>Total Percent</th>
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</tr>
<tr>
<td>13</td>
<td>3</td>
<td>2.9</td>
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<tr>
<td>14</td>
<td>10</td>
<td>9.8</td>
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<td>15</td>
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### Table 4-2 Ethnic Background

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<tr>
<td>Latino American</td>
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<tr>
<td>European American</td>
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<td>22.6</td>
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<tr>
<td>Other</td>
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### Table 4-3. Regressions

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<th>$t$</th>
<th>$F$</th>
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<tr>
<td>Model 1</td>
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<td></td>
</tr>
<tr>
<td>Mother Involvement</td>
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<td>.108</td>
<td>-.512</td>
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<tr>
<td>Father Involvement</td>
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<td>.012</td>
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Dependent variable: Decision-making  
* $p < .05$, ** $p < .01$  

### Table 4-4. Regressions

<table>
<thead>
<tr>
<th>Predictor Variable</th>
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<tr>
<td>Model 1</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict with Mother</td>
<td>.177</td>
<td>.031</td>
<td>1.801</td>
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<tr>
<td>Conflict with Father</td>
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<td>.025</td>
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Dependent variable: Decision-making  
* $p < .05$, ** $p < .01$  

### Table 4-5. Regressions

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<th>Predictor Variable</th>
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<td>Peer antisocial</td>
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<td>Peer neutral</td>
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<td>.042</td>
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Dependent variable: Decision-making  
* $p < .05$, ** $p < .01$
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<th>7</th>
<th>8</th>
<th>M</th>
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<td></td>
<td></td>
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<td>4. Father involvement</td>
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<td>-0.67</td>
<td>-0.051</td>
<td>-</td>
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<td></td>
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<td>4.42</td>
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<td>5. Peer antisocial</td>
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<td>-0.09</td>
<td>-0.27</td>
<td>-0.04</td>
<td>-</td>
<td></td>
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<td>-0.02</td>
<td>-0.14</td>
<td>-0.01</td>
<td>0.39</td>
<td>-</td>
<td></td>
<td></td>
<td>24.93</td>
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<td>7. Peer neutral</td>
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<td>0.32</td>
<td>0.42</td>
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<td>8. Decision making</td>
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<td>0.159</td>
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<td>0.03</td>
<td>0.20*</td>
<td>0.14</td>
<td>0.26**</td>
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Means, Standard Deviations, and Inter-correlations among conflict with mother, conflict with father, mother involvement, father involvement, peer antisocial, peer prosocial, peer neutral and decision making * p < .05, ** p < .01
CHAPTER 5
DISCUSSION

Adolescent girls now make up the fastest growing segment of the juvenile justice system and have forced a shift in focus for law enforcement, social services, and others involved with adolescent girls (Scahill, 2002). The purpose of my study was to determine if there is a direct relationship between the quality of decision-making of juvenile delinquent females and the quality of parent-adolescent relations, plus the influences, positive or negative, of their peers. More specifically, does a poor relationship with family, particularly parent or parents, or associations with peers, who exert negative influences, or both, contribute to poor decision-making by girls who are delinquent.

This chapter describes the contributions of the current investigation. First the limitations of my study are discussed. Then, the implications of the findings of my study along with recommendations for future research are outlined. The chapter concludes with a summary.

Limitations of the Study

Although the findings of my study provide information that both supports and challenges prior theories and research outcomes, the results and implications drawn from my study must be assessed within the context of the study’ limitations. These limitations include, but are not limited to, comprehension issues, generalizability of the study sample to the population, developmental issues, responder biases, and instrument validity.

The first limitation of my study is responder biases, which may be due to several factors. Responders, such as offenders, may be not be truthful with their answers and/or “Christmas Tree” their responses for several different reasons, including a fear of repercussions, or additional sanctions being added to their program (Bloom, 2002). Although their responses are confidential, they may have feared that if their responses demonstrated they were not making
progress in the program, it would lead to additional time being added to their program. In addition, girls who are in residential programs are oftentimes looking for guidance from any type of authority figure and can be in a frame of mind to want to please those around them or be socially desirable (Bloom, 2002). This may explain why they would answer with what they perceived to be the right thing to do as opposed to what was really true for them. For example, in the BPVI questionnaire, when the girls had questions concerning whether to “steal answers from the teacher or turn in the answers,” they may have chosen the answer “turn the answers in” since that would be the correct thing to do. This social desirability may have unduly influenced the respondents’ completion of the self-report instruments.

Another responder limitation could be the girls did not want to portray a negative image of their caregivers for the study. The girls may have an idealized image of what they wished their parent(s) would be, thus resulting in the responders reporting lower than expected levels of conflict and higher levels than expected of involvement. Although prior research has indicated that girls who are delinquent have weaker bonds and relationships with their fathers, females, more so than males, may hold on to an idealized image of their fathers (Chesney-Lind & Shelden, 1998).

A third reason that could have caused responder bias for the girls answering the surveys was the timing of the administration of the surveys. The day the surveys were administered was a day off for the girls. A few of them were quite upset at having to get up early to come down and answer the questions. The site contact assisting with organizing the girls spent a considerable amount of time trying to convince the girls to participate. Since some of the girls were coerced into participating, this could explain why some them may have used the “Christmas Tree” tactic in answering their questions.
There were also some limitations with the instruments. Although all three instruments used have both sufficient levels of validity and reliability, they may not be applicable to the juvenile offender population. While the BVPI and DMQ have been used previously with the juvenile offender population; in their testing manuals, these instruments fail to provide normative data about adolescent offenders. Therefore, this population may need its own reliability measure, item response study, and construct validity assessment. Also, there are constructs within the juvenile offender population that would best be assessed via clinical observations.

The PEQ assessment of the parent-adolescent relationship is based on adolescent self-report and not on direct observation. It has been noted that self-report measures of parenting are typically only modestly correlated with measures based on direct observation (Holden & Edwards, 1989). According to Mague et al. (2005), “adolescent perceptions do, however, offer distinct advantages over alternatives. The impact of parenting on adolescent adjustment is likely to be mediated by how adolescents perceive their parents and there is substantial support for the reliability and predictive utility of the adolescent ratings of the parent-adolescent relationship” (p. 982).

The conclusions that can be drawn from this study are limited by the relatively small sample size (n=102). A larger sample that would include more ethnicities and more girls at the younger and oldest ends of the age spectrum would provide more power to detect differences between the groups. An additional limitation is the lack of a comparison group. This lack prohibits the comparison of the quality of decision-making of adolescent girls in the general population with that of the delinquent population.
Implications

Because the results of the study provided insufficient evidence to reject two of the stated null hypotheses and partially accept one, the value of these instruments to serve to predict levels of decision-making within the juvenile delinquent population was limited. On the contrary, the results of this study can contribute to eliminating certain variables and combinations thereof as indicators of quality decision-making within this population. In particular, this study revealed that within the population of girls who are deemed delinquent, parents’ level of conflict, involvement with their adolescent girls’ prosocial and antisocial behaviors may not be accurate indicators of the soundness or lack thereof of adolescent decision-making. This also could be due to the limitations of my study.

Earlier research has indicated that there is no consistent correlation between the level of decision-making by adolescent girls and aspects of the parent-adolescent relationship. This study confirmed those research outcomes but with a new subgroup, which were girls who were delinquent. Then again, since involvement in the juvenile justice system can be an indication of the lack of sound decision-making skills, the absence of a significant correlation may be due to limitations of cognitive abilities.

The results of this study may also be used to disprove or challenge certain theories involving the decision-making by delinquent girls as it relates to the parent-adolescent relationship. There is a presumption among theorist that the parents’ level of involvement, in combination with the level of conflict of the parents and their adolescents may be the pertinent variable necessary to ascertain the level of decision-making of adolescents. Based on the findings of this study, this presumption was not confirmed.
Future Research

The need for further research is evident. However, a wide range population sample with a large sample size and a control group would be needed in future research to improve the generalizability of the findings. Adolescence involves intense socialization, which includes the development of strong peer relationships through key exchanges between and among adolescents (Godwin, Steinhart, & Fulton, 1996). “The aspects of the environment that are most powerful in shaping the course of psychological growth are overwhelmingly those that have meaning to the person in a given situation. Depending on the individual, this may impact the importance of a given situation and the effects of both parent and peer influence” (Bronfenbrenner, 1979, p. 22). Future research should focus on the totality of the influence of these aspects of the environment and socialization on the decision-making of adolescents.

Evans, Brown, and Killan, (2002) noted the following:

> Interventions designed to enhance adolescent decision-making skills have led to outcomes such as higher levels of school retention, economic self-sufficiency, and more responsible sexual behavior with pregnant and parenting adolescents, lower mean tobacco use at the 2-year follow up of a substance abuse prevention program, and higher levels of positive prosocial behavior and lower levels of antisocial, self-destructive and socially disordered behavior at a 4-to-6-year follow up of a social decision-making and problem-solving program. Unfortunately, very few interventions have focused primarily on enhancing decision making among delinquent or incarcerated youth (p. 561).

Future studies should seek to fill this void.

In addition, future research should seek to develop instrumentation that specifically measures delinquent decision-making. Although there are several instruments that measure decision-making of adolescents, only one other instrument measures criminal decision-making (Fried & Repucci, 2002). This instrument may help to better identify certain aspects of criminal decision-making that may better inform research, practice, and development of interventions for delinquent youth.
Lastly, Evans, Brown, and Killan (2002) assert that, although decision-making skills alone do not account for risk behavior, it is important to evaluate adolescents’ planning and decision-making skills to determine possible areas in need of intervention. It is also important to assist adolescents in adopting a future orientation, so that both long term and short-term goals and consequences are considered before making choices. Delinquents obviously are at a higher risk for inadequate skills, which is why it is imperative that they be considered when developing and implementing a program that includes or focuses on decision-making skills.

It has been noted, however, research has yet to answer how to incorporate decision-making into prevention programs. More specifically, what decision-making skills should be taught and in what context, and how these skills should be taught. These are important questions that should be addressed in future studies.

**Summary**

This chapter discussed the results of the study. It was determined that there was an association between neutral peer influence and decision-making, while there was no association between parental involvement, parental conflict, or antisocial and prosocial peer influence. Implications for research and practice were detailed, including a need to develop instrumentation specifically to measure adolescent criminal decision-making. Limitations were described, such as responder biases, which may have caused them to “Christmas Tree” their responses or rate parent in an idealized manner rather than truthfully. Lastly, the need for future research was discussed.
APPENDIX.
INFORMED CONSENT LETTER

Dear Participant,

Thank you for your consideration for participation in this study. The purpose of this study will be to examine the decision-making of girls who have been placed in a residential facility. The information that you provide may be helpful in understanding how girls make decisions which will help to develop more programs that will help girls be the best they can be.

If you volunteer for this study, you will be asked to complete surveys that contain items about your relationship with your parents and friends. You will also be asked to complete surveys about how your friends influence the decisions that you make.

Participation in this study is completely voluntary; your release will not be affected by whether you do or do not participate. You can stop participating at any time. You will not have to put your name on any of the forms and no one will be able to identify your answers. The study will take between 1 to 1 ½ hours depending on how quickly you answer the questions. There are no risks associated with completing this survey. The compensation for this study will be a pizza party for those who participate and goody bags which are going to be filled with items approved by your director. However, there are no direct benefits to you for participating.

If you have questions about the surveys, you can send a request to your mental health counselor, who will then contact me, Pamela Jenkins, 352-361-6938 or Edil Torres, 352-392-0731. If you have questions about your rights as a research participant, contact the UFIRB2 office, Box 112250, University of Florida, 32611-2250; ph (352) 392-0433.

I have read the agreement above. I voluntarily agree to participate in the procedure and I have received a copy of this description.

Participant___________________________         Date ______________________
(Minors cannot give written consent)

Principal Investigator____________________      Date______________________
LIST OF REFERENCES


Patterson, G., & Dishon, T. The contributions of families and peers to delinquency. *Criminology, 23*, 63-79.


BIOGRAPHICAL SKETCH

Pamela Jenkins was born in Tuskegee, Alabama at Tuskegee Institute Hospital. She was raised by her mother, Eva Jenkins, and grandparents in Salem, Alabama. When she was 12, her family moved to Opelika, Alabama, where she graduated from Opelika High School in the top 10% of her class. Her son, Brandon, was 3 weeks old when she began her undergraduate studies at Alabama State University. She completed her B.S. degree in 1993.

In 1993, she joined the United States Army at the rank of specialist. She received training as a dental specialist at Ft. Sam Houston in Texas. She was stationed at Ft. Carson (Colorado Springs, CO) where she completed her tour. After a year’s break, she enrolled in a master's degree program at Columbus State University. She received her M.S. in community counseling in 1999. She moved to Nashville, Tennessee and worked at Mental Health Cooperative for a year.

With her son, Brandon, she moved to Florida in hopes of attending the University of Florida’s counselor education program. She became a Nationally Certified Counselor during this year as well. Pamela was accepted into the Counselor Education Program and became a Grinter fellow and Minority Scholar. She also began an assistantship at P. K. Yong Research School. Pamela became a licensed counselor in 2003. In 2004 she completed her internship at Florida State Prison.

Pamela currently resides in Gainesville, Florida and is currently the mental health authority at the Marion Juvenile Detention Facility.