



1991

Family Functioning, Socialization, Ego Development, and Aggressiveness in Juvenile Delinquent Girls

Cindy Joan Nowinski
Loyola University Chicago

Follow this and additional works at: https://ecommons.luc.edu/luc_diss

 Part of the [Psychology Commons](#)

Recommended Citation

Nowinski, Cindy Joan, "Family Functioning, Socialization, Ego Development, and Aggressiveness in Juvenile Delinquent Girls" (1991). *Dissertations*. 3200.
https://ecommons.luc.edu/luc_diss/3200

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.



This work is licensed under a [Creative Commons Attribution-NonCommercial-No Derivative Works 3.0 License](#).
Copyright © 1991 Cindy Joan Nowinski

FAMILY FUNCTIONING, SOCIALIZATION, EGO DEVELOPMENT,
AND AGGRESSIVENESS IN JUVENILE DELINQUENT GIRLS

by

CINDY JOAN NOWINSKI

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

September

1991

Copyright, 1991 by Cindy Joan Nowinski

All rights reserved

ACKNOWLEDGEMENTS

I would like to thank the members of my dissertation committee, Maryse S. Richards, Ph.D., Dan P. McAdams, Ph.D. and Ronald R. Rosenthal, Ph.D. for their support, encouragement, and many helpful suggestions. Special thanks are extended to Dr. Richards for serving as committee chair. Her help took many forms, including ideas about measures to use and relevant areas of literature to explore.

Many thanks go to Graciela Viale-Val, Psy.D., and to John Lynch, M.S., and Jennifer Jaworski, who were my colleagues on the larger project of which this study was only a part. Dr. Rosenthal earns additional thanks for not only serving as a committee member but also for his role in helping design this project, and in organizing and analyzing the data. I am also grateful to Jerry Sweet, Ph.D. for allowing me the use of computer and data analysis facilities.

Thanks to my family. My parents, Edward and Joan Nowinski, provided babysitting and other support. My husband, William Miceli, and my children, Vanessa and Nicholas, gave me patience, understanding, and the necessary perspective.

VITA

The author, Cindy Joan Nowinski, was born on April 15, 1960 in Chicago, Illinois. She is the daughter of Edward and Joan Nowinski. Her secondary education was obtained at Marie Curie High School, Chicago, Illinois. She received a Bachelor of Science degree from Loyola University of Chicago in May, 1982 and a Master of Arts degree in clinical psychology from Loyola University in 1986.

Ms. Nowinski's graduate clinical training consisted of a two year clerkship at the Charles I. Doyle Center of Loyola University, a nine month clerkship at Lutheran General Hospital and an internship at the Illinois State Psychiatric Institute.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
VITA	iii
LIST OF TABLES	vi
 Chapter	
I. INTRODUCTION	1
The Family and Delinquency	5
An Integration of Control and Learning Theories	10
Research on the Family and Delinquency	12
Parent-child Relationships	13
Organization-Control	14
Intrafamilial Discord	15
Physical Abuse	17
Interactions Among Family Characteristics.....	19
Sex Differences	21
Types of Delinquency and Family Factors.	25
The Contribution of Family Factors.....	29
Personality and Delinquency	31
Family Factors, Socialization, Ego Development and Delinquency	43
Hypotheses	46
II. METHOD	48
Subjects	48
Measures	49
Procedure	56
III. RESULTS	57
Correlations and Factor Analyses	68
Multiple Regression Analyses	70
IV. DISCUSSION	76
Correlations and Factor Analyses	77
Multiple Regression Analyses	85
Conclusions	88
REFERENCES	90

LIST OF TABLES

Table	Page
1. Milestones of Ego Development	35
2. Measures	55
3. Variables Included in Final Analyses	58
4. Factor Solution for Family Functioning Measures	59
5. Descriptive Statistics for All Subjects on Dependent and Independent Measures - Composite Scales and Subscales	62
6. Correlations Between Aggression Measures and Measures of Family and Personality Functioning	64
7. Significant Correlations Between Dependent and Independent Measures for African- American and for White Subjects	66
8. Scale and Subscale Means and Standard Deviations for White and for African-American Teenagers	67
9. Stepwise Regressions Explaining Aggression	72
10. Stepwise Regressions Explaining Aggression	73

CHAPTER I

INTRODUCTION

Crime and delinquency are troubling societal problems. Almost everyone has been affected by them to a greater or lesser degree. Yet despite their seriousness, we still do not fully understand why people commit criminal and delinquent acts. Though considerable progress has been made toward that end, gaps in our knowledge and theories, particularly about female delinquency, still remain. A major unresolved question is whether the causes and mechanisms of male and female delinquency are the same. Though some studies suggest that they are quite similar (Henggeler, 1989) this is by no means conclusive. This study will speak to that question by examining the relationships between female delinquency and certain family and personality characteristics that have been implicated in male delinquency.

When most people think of a delinquent, they probably imagine a male: the youth who steals cars, defaces the building, gets in gang fights; the "bad kid". This image has some basis in reality, as statistics show more males than females commit aggressive and serious delinquent acts and do so more frequently (Farrington, 1987; Figuera-McDonough,

1985). However, females do engage in all types of delinquency and recent official statistics suggest a dramatic increase in female violence (Hanson & Henggeler, 1982). Though self-report data cast some doubt on this (Henggeler, 1989), there is nevertheless a sizable number of female adolescents who have committed serious and/or aggressive delinquent acts. It is this group of females that this study hopes to understand better because effective prevention and treatment demand a fuller understanding of these females as well as those who commit more minor transgressions. Unfortunately, while research and theories about female delinquency have risen dramatically in recent years, most investigations to date have focused primarily, and sometimes exclusively, on males. Thus, there is a continued need for delinquency research with females as subjects.

A substantial body of research, conducted primarily on males, demonstrates that all delinquents are not the same and that they can be grouped in meaningful ways. One way they differ is in terms of aggressiveness. In the 1940s, Jenkins and Glickman (1946) discovered that delinquents, on the basis of behavior ratings and case history analysis, tended to fall into either the Undersocialized Aggressive or Socialized Delinquent groups. The Undersocialized Aggressive pattern was characterized by overt aggression, negativism and a lack of concern for others. The Socialized Delinquent pattern was characterized by less overtly aggressive behavior

(e.g., stealing, truancy and drug use) in the context of good peer relations. As can be seen, in these groups aggression is meaningfully associated with certain personality and interpersonal characteristics. These categories have been subsequently replicated and extended in many delinquent populations (Quay, 1987). However, these delinquent patterns are not totally independent and arbitrary classification procedures are sometimes necessary to fit individuals into these discrete groups (Megargee, Bohn, Meeger & Sink, 1979).

More recently, researchers have described patterns of behavior by which delinquents can be usefully categorized. Loeber and Schmalting (1985a) conducted a meta-analysis of 28 studies of child adolescent psychopathology in both males and females to determine patterns of antisocial behavior. Their analysis yielded one dimension which they called overt-covert antisocial behavior. One end of this dimension is anchored by overt or confrontative behaviors such as arguing, physical aggression, and temper tantrums. The other end consists of covert, concealed and generally nonaggressive acts such as stealing, truancy and firesetting. Using this continuum, delinquent youths can be categorized as either overt/aggressive, covert/nonaggressive, or mixed. Two of these categories, the overt/aggressive and covert/nonaggressive, correspond closely to the Undersocialized Aggressive and Socialized Delinquent patterns respectively (though the overt and covert patterns are based

strictly on behavior and do not include personality characteristics, etc.), and the mixed category appears to combine elements of both patterns. As with the Undersocialized Aggressive and Socialized Delinquent patterns, males categorized in these three ways differ in family background and responsiveness to different types of treatment (Loeber & Schmaling, 1985b; Loeber, Weissman & Reid, 1983; Patterson, 1982) and in the likelihood of police contact (Loeber & Schmaling, 1985a). For example, chronic, recidivist delinquents appear to be mixed or versatile; they engage in both overt (aggressive, person-oriented) and covert (delinquent, property-oriented) types of antisocial behavior (Loeber & Schmaling, 1985a; Rojeck & Erickson, 1982).

Though no research has yet been done grouping females according to these patterns, some studies have compared family backgrounds of violent versus nonviolent females with mixed results. This study will also focus on aggressive behavior as a factor that distinguishes types of delinquents. It will expand on previous research by examining personality as well as family characteristics related to aggressiveness in incarcerated female delinquents.

I will proceed by first presenting some theories of delinquency that describe the role the family presumably plays in the etiology of delinquent behavior. I will then review research on specific aspects of family functioning; namely, parent-child attachment, organization-control, intrafamilial

discord, and physical abuse. In later sections I will describe two cognitive aspects of personality, socialization and ego development, thought to be related to delinquency and the research that supports or discounts that link. As the bulk of delinquency research has been conducted on males, I will specify when females have been included.

The Family and Delinquency

Delinquency is a legal construct and refers to the violation of legally established codes of conduct. Violations can be single or multiple and vary in severity. Two major psychosocial explanations of the etiology of delinquency are control and social learning theories, each of which is briefly described below.

Instead of asking why people commit delinquent acts, Travis Hirschi (1969) focused on what prevents people from doing so. Control or bond theory (Hirschi, 1969) postulates that delinquency results when a person is unattached to society (i.e., to others). This lack of social bonding is equivalent to freedom from moral restraint and leads to an increased likelihood of delinquent behavior. There are four elements to social bonds. These are attachment, belief, commitment and involvement, with attachment considered to be the most important. When children attach or bond to their parents (and conventional others), they are more likely to conform to expectations and be committed to achieving socially approved goals (assuming, of course, that parents represent

conventional cultural expectations and norms and not deviant ones). This is because they want to please those they are attached to and do not want to embarrass, disappoint or hurt them by getting into trouble. If committed, individuals are assumed to invest some of themselves in pursuing those goals and are therefore more likely to conform because they do not want to risk their investment (Krohn & Massey, 1980). They are also more likely to be involved in and invest time and energy in the kinds of activities (e.g. school, work) that would fulfill those goals. This involvement decreases the time available for delinquent activities. Accompanying this process is belief in the values and norms of society. Without this belief, the individual is freed from the social bond and therefore more likely to commit deviant acts. Internalization of the values and norms proceeds from attachment to parents or parental figures through concern for the approval of persons in authority to a belief that the rules of society are binding on one's own conduct. Research has generally supported the propositions underlying Hirschi's theory (Canter, 1982; Hirschi, 1969; Krohn & Massey, 1980; Nye, 1958). That is, a weakening or severing of any one or a combination of the elements of the social bond is associated with an increased likelihood of delinquency.

More recently, it has been argued that a more complete view of social control theory is necessary (e.g., Wells & Rankin, 1988; Wilson & Herrnstein, 1985), one that

incorporates the earlier concept of direct control (Nye, 1958). Nye defined direct control as the application (or threat) of punishments and rewards to gain compliance to the conventional order. Parents are major agents of direct control but institutions and laws also are. In their reconceptualization of direct parental control, Wells and Rankin (1988) suggest that it has three basic components: normative regulation, monitoring and punishment. Normative regulation refers to the ways in which parents specify the rules and constraints for children's behavior and their expectations for behavior. Monitoring refers to supervision of children's behavior to determine compliance or noncompliance. Punishment is defined as the application of negative sanctions for misbehavior and rule violation. Each of these three components is expected to be related to delinquency, and, it is argued, needs to be included along with attachment when studying delinquency.

Control theory does not distinguish between different types of delinquency nor, therefore, does it address the question of differences in how various types of delinquency arise. Explanations for different types of delinquency can be found within social learning theory, however. Social learning theory proposes that a child's behavior is influenced by the kinds of behavior parents' model and tolerate in the family. Thus, if parents model and tolerate aggressiveness, their children are more likely to be

aggressive. Central to the theory is the notion that behavior is maintained or inhibited by its consequences. Individuals learn not to offend by being trained in socially acceptable behaviors that are subsequently maintained by negative consequences for infractions and positive consequences for rule-keeping. Individuals learn to offend when they receive intermittent positive reinforcement for offending.

Patterson (1982), who has conducted some of the most extensive and careful research in the social learning area, presents an updated model based on his findings. Patterson's coercion theory postulates that there are 2 components to the process of becoming delinquent. First, the child is inadequately socialized at the crucial developmental stages. This results in an accumulating deficit in social skills and competencies in the crucial areas of work, peer relations and academic achievement. Secondly, by tolerating or not tolerating deviancy the family determines what is an acceptable rate of deviant behavior and which antisocial patterns, if any, are acceptable. Taken together, inadequate socialization and family toleration of deviancy significantly increases the likelihood that a child will exhibit delinquent behavior.

Coercion theory assumes that antisocial behavior is intrinsically reinforcing and that antisocial children maximize their short term gains while largely ignoring long-term consequences of their acts. The theory further

hypothesizes that delinquent children are characterized by "arrested socialization". In effect, this concept suggests that aggressive and delinquent children are not performing "deviant" acts per se. Rather, because of inadequate socialization, they are functioning at a lower level of socialization. That is, they are exhibiting behaviors considered normal in pre-school children. Finally, coercion theory postulates that children do not outgrow deviant behavior. They remain deviant unless they are nonphysically punished for deviant acts and also taught competing prosocial responses.

Rutter and Giller (1983) describe how parents of deviant children fail to provide the necessary conditions for the learning of prosocial behavior and the avoidance of antisocial behavior. Briefly, parents do not elucidate a clear set of household rules; monitoring of the child is inadequate; events are not clearly labeled as deviant or non-deviant; parents do not respond differentially or effectively to desired and undesired child behaviors; encouragement and warm interest in the child is lacking; problem-solving is ineffective and parents fail to follow through on discipline.

In addition to the above conditions, families with aggressive children are characterized by frequent coercive interactions, frequent punishment and little pleasurable family interaction (both in terms of interchanges during which the child receives non-critical parental attention and

interest and in terms of shared pleasurable activities). This latter variable is considered important because it is hypothesized that parent's reinforcing value is increased by the amount of shared pleasure. Coercive interactions are characterized by mutual feelings of irritation and anger and parents' failure to specify the behavior changes they desire in the child. These interactions are unlikely to have a satisfactory resolution.

Coercion theory also suggests that there are two major forms of juvenile antisocial behavior: the stealer and social aggressor patterns (conceptually equivalent to the covert/nonaggressive and overt/aggressive patterns described earlier). Each is related to different family processes and has different implications for later adjustment. Both patterns begin with noncompliance, but stealers then progress to such activities as lying, stealing and firesetting while the social aggressor goes on to yelling, tantrums and ultimately fighting and physical aggression.

An Integration of Control and Learning Theories

In most models that integrate control and learning theories, family processes during childhood are considered important because they can weaken or strengthen social bonds and can also teach and reinforce deviant behavior (Elliot & Ageton, 1979; Fagan & Wexler, 1987). According to Fagan and Wexler's integrated theory (1987), delinquent conduct results from the weakening of prosocial bonds, both external

attachments (e.g., to family and school) and internal beliefs, and subsequent bonding to delinquent beliefs and norms. Early childhood socialization to violence is significant in the development of violent behavior. In the family, differential reinforcement of aggressive behavior may occur through direct reinforcement of aggression, imitation or modeling of others' violent behavior, and the learning that aggression is acceptable and likely to be rewarded. Thus, weak family bonds combined with a violent family environment are postulated as leading to aggressive delinquency.

Research on the Family and Delinquency

As noted, in these and other theories of delinquency the family plays an important role in socialization and personality development. It is in the family that children first learn the interpersonal and behavioral skills that facilitate or obstruct successful functioning in the real world. There is an extensive literature demonstrating a relationship between family functioning and delinquent and antisocial behavior. In most of the research, individual family members, dyads, and occasionally the mother-father-child triad are studied. An increasing number of studies, however, examine the entire family system in accordance with the idea that the family system has an identity and typical functioning style that is greater than the sum of its parts.

In the following section only research in the areas of family functioning relevant to the present study will be reviewed. These studies will be discussed under four dimensions of family functioning. These dimensions are parent-child relationships, organization-control, intrafamilial discord, and physical abuse. These dimensions are not mutually exclusive, but are useful in categorizing research. Included in this review are studies on the relationship between family factors and aggression in nondelinquent populations as they have a bearing on violent delinquency.

Parent-child Relationships

Perhaps because of the popularity of control theory, the quality of parent-child attachment has been one of the most extensively investigated family variables in delinquency research. For males, delinquency has been related to distant parent-child relationships (Linden & Hacklin, 1973); colder and less affectionate father-son relationships (Borduin, Pruitt & Henggeler, 1986; Hanson, Henggeler, Haefele & Rodick, 1984), and less warm, affectionate and supportive mother-son relationships (Hanson et al., 1984). Investigations of the family system show that delinquent boys tend to see their families as less cohesive and expressive (Le Flore, 1988) and less warm (Borduin et al., 1986; Henggeler, Hanson, Borduin, Watson & Brunk, 1985).

Attachment must be considered within the context of socioeconomic status and race. For instance, Johnstone (1978) discovered that the relation between family integration (degree of parent-child closeness, amount of shared parent-child activity, perception of parent as an authority, family structure, family rules) and delinquency varied as a function of the larger environmental context. Using a sample of 6400 households he found the family's role to be more pronounced in higher socioeconomic areas. Rosen (1985) found the effect of attachment varied with race. His research showed degree of father-son involvement to be related to delinquency for African-American males but not for whites.

Poor parent-child relationships have been associated with greater aggressiveness in delinquent and normal male populations. Weak family bonds are related to more violent delinquency (Fagan & Wexler, 1979). Similarly, parental rejection (Loeber & Dishion, 1984; McCord, McCord & Howard, 1961) and mother's negativism (hostility, rejection, coldness and indifference) (Olweus, 1980) are associated with increased aggressiveness in normal samples of boys.

Findings for girls also suggest a relationship between parent-child bonds and antisocial behavior for both normal (Austin, 1978; Nye, 1958) and delinquent populations (Campbell, 1987). However, Riege (1972) found only a few differences in parent-child relationships of delinquent and nondelinquent girls. These differences were: delinquents spent less leisure time with their mothers, they were less satisfied with their relationships with their parents, they wanted more involvement with their parents, and they were less likely to feel equally loved by both parents. This study suggests that satisfaction with, rather than objective quality of parent-child relationships, may be an important factor in female delinquency.

Organization-Control

Under this heading are included both family system and parent-child dimensions related to the family power structure and to family rules. Moos (1974) describes this as the system maintenance dimension which includes those aspects of family

functioning that specify how the family is organized and the degree of control members exert over each other. An important element of system maintenance is the capacity of the family system to change its power structure, role relations and rules as needed (adaptability). The findings regarding family system aspects and delinquency are mixed. Using a sample of African-American juvenile offenders, Rodick, Henggeler & Hanson, (1986) found that families of juvenile delinquents were relatively chaotic and disorganized. In contrast, (Blaske, cited in Henggeler, 1989), discovered that families of juvenile offenders were relatively rigid and inflexible, especially families of violent adolescents. Tolan (1988b) also found a relationship between family adaptability and delinquent behavior in a mixed sex sample of adolescents. However, he found no association between family adaptability and delinquency for normal male youths (1988a). These inconsistencies could be the result of sampling variables (e.g., the samples differed in terms of race, socioeconomic level, severity of delinquent behavior). Using a sample of high school boys and girls, Tolan (1988b) found female delinquency involvement to be unrelated to family adaptability.

Intrafamilial Discord

When comparing families of delinquent and nondelinquent males, researchers have found that delinquents tend to live in families with higher amounts of discord and

parental conflict (Borduin et al., 1986; Hanson et al., 1984;) Among delinquents, high environmental turmoil is related to higher aggressiveness (DiLalla et al, 1988). Parental conflict is also related to aggressiveness in nondelinquents (McCord et al, 1961). Studies with male and female subjects suggest that conflict affects the sexes differently. While Norland and associates (1979) found that family conflict was related to status, property, and aggressive offenses for both boys and girls, the total effect on female delinquency was greater. Further, the relation of family conflict to female delinquency was more likely to be indirect than direct. Conflict indirectly affected girls through reduced identification with parents, adoption of more relativistic beliefs about the law, reduced parental supervision, and increased exposure to delinquency-supporting social networks. For males, indirect effects were limited to reduced identification and adoption of relativistic beliefs. Extreme forms of conflict (physical violence not involving the subject) are also related to adolescent delinquency and aggressiveness. Straus (1981, cited in Koski, 1988) found that parents' physical conflict was positively associated with delinquency in his large (N= 2143) national sample. In another study involving a smaller sample of high school seniors he found parental conflict to be related to violence for males but not for females. On the other hand, Gully et al. (1982) found that violent females reported observing more

parental violence than violent males. Other studies are inconsistent (see review by Koski, 1988). Koski (1988) makes the point that it is important to consider the total family context. Families that have more than one set of violent interactions may differ from those that do not. Inconsistencies in the research may in part reflect these differences.

Physical Abuse

While the idea that abuse is related to delinquency (particularly aggressive forms) seems intuitively correct (i.e., violence breeds violence) research is suggestive but nonconclusive. Some of the difficulty lies in the definitions of abuse. It is often hard to decide where severe physical punishment leaves off and abuse begins. Further, methodological problems limit the conclusions that can be drawn. Lane and Davis (1987) point out that many studies do not use a representative sample of maltreated children and/or do not use appropriate control groups. After reviewing some of the published research available at that time, they conclude that the link between abuse and aggressiveness is clear. However, given the methodological limitations, the link between abuse and delinquency is only suggestive; delinquency among abused groups is not significantly above the prevalence of delinquency in the general population. This conclusion is in accord with research by Fagan, Hanson and Jang (1983) that shows a low incidence of both child abuse and

parental violence among violent juvenile offenders in comparison to nationwide rates.

Additional research on abuse and antisocial and delinquent behavior which attempts to overcome some of the methodological problems has been conducted since their review. These studies support a link. For example, using a matched sample of delinquent and nondelinquent boys, Lewis, Pincus, Lovely and Moy (1987) found that delinquent boys were significantly more likely than their nondelinquent peers to have been physically abused and to have witnessed extreme family violence. Further, being physically abused was correlated with aggressiveness in both the nondelinquent and delinquent samples. Van Voorhis et al. (1988) found physical abuse to be positively associated with self-reported general delinquency, violence and status offenses in a male high school sample. Widom (1989b) points out that given the literature suggesting that aggressiveness is a fairly stable personality trait, developmental research indicating that abuse is related to aggression in toddlers and children suggests that it will also be related to adolescent and adult aggression. However, there may be gender differences. In a prospective study, Widom (1989a) found childhood physical abuse to be related to adult violent crime for males but not for females. In a recent review, Koski (1988) finds a clear link between male aggressive deviance and parental abuse but an uncertain one between abuse and female aggressive deviance.

She also concludes that for males, and perhaps for females, parental abuse is associated with nonaggressive or mixed forms of delinquency. In addition, she finds that adolescents who are victims as well as bystanders to abuse are particularly likely to exhibit delinquent or aggressive behavior.

Interactions Among Family Characteristics

The bulk of the above research supports the contention that family factors are related to delinquency. This conclusion is shared by most reviewers (e.g., Geismar & Wood, 1986; Henggeler, 1989; Hetherington & Martin, 1986). Different investigators using different operational definitions of constructs, different methods of measurement and coming from different theoretical perspectives have produced remarkably similar results. However, the question of how different family variables interact and their importance (relative to each other) remains unanswered. Loeber and Stouthamer-Loeber (1986) conducted a major review and meta-analysis of concurrent and longitudinal studies on the relations of family factors to juvenile conduct problems and delinquency that provides some information. The findings of the meta-analysis supported both control and social learning theories, with differences emerging by type of study. On the one hand, attachment, reflected in parent-child involvement and affection, was strongly related to antisocial behavior in concurrent, self-reported delinquency studies. On the other hand, child rearing factors such as supervision

and discipline style were more powerful in longitudinal studies but less strongly related in concurrent studies.

The results of other multivariate and multiple regression studies (subsequent to or not included in the Loeber's review) also indicate that both relational and direct control variables are important, with control variables possibly being more significant for males than females. Wells and Rankin (1988), examining the roles of different elements of parental control to temporally subsequent self-reported delinquency in high school boys, found direct controls to be at least as related to delinquency as indirect controls or attachments. In a concurrent study examining several different family variables, Patterson and Dishion (1985) found that parental supervision accounted for most of the variance in male delinquency and had both direct and indirect (e.g. increasing the likelihood of association with delinquent peers) effects. In contrast, Campbell (1987) found that, of several family variables, attachment was the most strongly linked to female delinquency. She assessed the relations of four different family dimensions (caring and communication, discipline, pressure (e.g. parents offer money for both good behavior and academic achievement) and mother-daughter closeness) to self-reported delinquency in a sample of officially delinquent and nondelinquent girls. Multiple regression analyses indicated that mother-daughter closeness was the most powerful dimension and explained 25% of the

variance.

These 3 studies suggest the possibility of different mechanisms for male and female delinquency. However, since males and females were not directly compared the differences could be due to sample characteristics, and/or the use of varying operational definitions and measures. The next section more closely addresses the issue of sex differences by reviewing research that was conducted with mixed sex samples.

Sex Differences

Although the Loebers' concluded (on the basis of their analyses of 22 studies in which both male and female subjects' behavior was separately related to parental variables) that the effects of family factors are very similar for boys and girls, such a conclusion is controversial. There is evidence for both positions. Canter (1982) studied the relationship of various family variables to self-reported delinquency in male and female adolescents. She assessed parent-child bonds in terms of adolescents' perceptions of their involvement with the family, parental influence on them, and how important the family was to them. Other factors assessed were family aspirations, family normlessness and the degree to which adolescents felt they were part of the family. Results showed that all family variables correlated with male and female delinquency, particularly with respect to status offenses and general delinquency. The correlations were higher for males

than females, especially with regard to serious offenses. Similarly, family variables were stronger predictors of serious offenses for males. However, these differences were very small and in a discriminant analysis family variables did not clearly discriminate between males and females. She concluded that the relations between family bonds and delinquency are very similar for females and males. Tolan (1988b) also failed to discover any significant sex differences in his sample. Both male and female adolescents who were dissatisfied with levels of family cohesion (they desired less) showed more delinquent and antisocial behavior. Results were interpreted to suggest that adolescents who perceived their families as less supportive and connected wanted to further separate from their families and that delinquency could be understood in this light. To make the link between parent-child relations and delinquency even more ambiguous, in a study by Johnson (1986) the quality of the parent-child relationship was unrelated to either self-reported or official delinquency for males or females.

Other research suggests that sex differences in the relations between family functioning and delinquency do exist. Gove and Crutchfield (1982) found parent-child interaction and levels of parental control to be most closely associated with delinquency in girls and the quality of the marital relationship to be most closely related to male delinquency. Cernkovich and Giordano (1987) also found that the relative

importance of family variables differed for males and females. They examined 7 dimensions of family interaction (control and supervision, identity support, caring and trust, intimate communication, instrumental communication, parental disapproval of peers, and conflict) in relation to self-reported delinquency in a sample of 824 adolescents. They found that identity support, conflict, instrumental communication, and parental disapproval of peers were the most important predictors of female delinquency. Among males, however, control and supervision, intimate communication and instrumental communication were most important. Henggeler, Edwards, and Borduin (1987) conducted an observational study evaluating gender differences in the family relations of delinquent adolescents. The results indicated that mother-daughter dyads in delinquent families had greater conflict than mother-son dyads in delinquent families. Krohn and Massey (1980) also found differences. In their investigation of various elements of the social bond, attachment was more strongly related to deviancy in males than in females while commitment (commitment to and involvement in conventional activities and attachment to school) and belief in conventional values and norms was more important for females. Their measure of attachment also included extent of parental supervision which renders their results somewhat hard to interpret. In contrast, Farnworth (1984) found parents' (but not youths') perception of the quality of parent-child

relations to be associated with "dishonest" delinquency (e.g. stealing, lying) in girls. Family relational qualities were unrelated to any type (dishonest, aggressive, group/gang related, escape-oriented) of delinquency for boys. Her measures were of unreported reliability, however.

Information regarding sex differences is also provided by multivariate studies that include family characteristics as one of several causal factors in delinquency. These studies generally suggest that similar models can describe male and female delinquency. For example, Simons, Miller and Aigner (1980) assessed the relations of such variables as parental rejection, the deviant values of friends, and educational and occupational opportunities to the self-reported delinquent behavior of approximately 4000 adolescents. The dependant variables showed similar correlations for both males and females. Elliot, Huizinga and Ageton (1985) found that a multidimensional and multicausal model including family, peer and school variables fit male and female delinquency almost equally well though it accounted for more of the variance in male delinquency.

Thus, the evidence regarding gender differences in family factors and delinquency is quite inconsistent. Some studies find that family variables impact equally on both sexes while some do not. Further, the studies that do find sex differences do not always find the same differences. Therefore, any conclusion about sex differences seems

premature at this time.

Types of Delinquency and Family Factors

Whether different family variables predict different types of delinquency is also unclear. Most studies do not distinguish between types of delinquents; rather, they differentiate between types of delinquent behaviors (e.g., property crime, aggressive crime, drug/alcohol use) and examine the relationships between these behaviors and family functioning. That is, youths are not placed into mutually exclusive categories and therefore they may show high rates of more than one kind of antisocial behavior. Those few studies that do differentiate between subtypes of delinquents usually include only males. In a recent review, Snyder and Patterson (1987) roughly divide studies as referring to either overt/aggressive (i.e., aggression/assault, aggressive conduct disorder, person-oriented crimes) or covert/nonaggressive (i.e., lying/stealing, nonaggressive conduct disorder, property oriented crimes) delinquency and draw some tentative conclusions. For example, in families with overt/aggressive boys, parents respond to behaviors in an inconsistent and noncontingent manner and are inept in carrying through on threats (King, 1975; Patterson, 1982). Family members are ineffective in controlling aggressive behavior and there is more conflict and aggression among them (King, 1975; Sears, Maccoby & Levin, 1957; and see review by Snyder & Patterson, 1987). Parents appear actively discouraged by their children

from supervising them or performing other child-rearing practices (See review by Loeber & Stouthamer-Loeber, 1986). Positive qualities, such as more frequent and friendly parent-child interaction, have also been described in these families (Snyder & Patterson, 1987).

In contrast, the parenting style of nonaggressively delinquent boys is one of lax and permissive discipline. These parents are less punitive, harsh and restrictive (See review by Snyder & Patterson, 1987). They are uninvolved in the caretaker role in the sense that they do little monitoring outside of the home, but they are sufficiently skilled in child management to control overt coercive behaviors at home (Patterson, 1982; Loeber, Weissman & Reid, 1983). They often accept delinquent acts (e.g. stealing) committed outside the home. Parents of nonaggressive delinquent boys also tend to be distant and unfriendly and to be focused on the gratification of their own needs (Loeber et al., 1983; Patterson, 1982; Reid & Hendricks, 1973; Snyder & Patterson, 1987). However, some studies have found little difference in family variables and overt and covert forms of conduct problems (e.g., Loeber & Schmalings, 1985b; White, Pandina & LaGrange, 1987), and others have found no relation between family functioning and serious crimes (Johnstone, 1978). This suggests caution in coming to any firm conclusions.

Less is known about the families of boys who show a

mixed pattern of delinquency characterized by high rates of both aggressive and nonaggressive delinquent behavior. These families do appear to be the most interpersonally conflictual. They have the highest rate of sibling conflict (Loeber, 1983) and parents show the highest rate of aversive behavior toward their children (Loeber et al., 1983). It can be hypothesized that these children will show the highest level of pathology of all three groups.

The association between types of female delinquency and family variables is ambiguous. The evidence comes from research examining types of antisocial behavior rather than types of delinquents. Stewart and Zaenglein-Senger (1984) found adolescents' comfort in communicating with parents, sense of acceptance, and congeniality of the marital relationship to be inversely related to the self-reported covert/nonaggressive delinquent behavior (e.g., property offenses) of 1,088 female high school students. The link between family factors and overt/aggressive behaviors (e.g., fighting and assault) was unclear. This study is limited, however, in that the authors used an unvalidated measure and the only analyses were between questionnaire items and specific offenses. Farnworth (1984) found the quality of the parent-child relationships to be related to different types of nonaggressive delinquent behavior for girls. In contrast, aggressive behavior was unrelated to any family characteristics. Van Voorhis et al. (1988) found gender

differences in the link between family variables and types of self-reported delinquency. Multivariate analyses showed that overall home quality (supervision, abuse, conflict, affection, and enjoyment of home) was more strongly related to nonaggressive delinquent behavior (e.g., general delinquency, property offenses, drug usage and status offenses) for females than males. Home quality was not related to aggressiveness for either sex. There was no significant connection between any of the subdimensions of home quality and types of delinquent behavior. Norland and associates (1979) discovered similar relationships between family variables and self-reported property and aggressive offenses for high school girls. Family conflict, reduced identification with parents and social support for delinquency was related to both types of offenses, though the relationships were slightly stronger for property crimes. A relativistic belief in the law was also associated with aggressiveness but not with property crimes. Canter (1982) found somewhat different family factors to be associated with stealing and with crimes against persons for girls. Aggression was positively associated with feeling unconnected to the family while minor theft was positively associated with family acceptance of deviant behavior.

The studies described above assessed self-reported delinquency in "normal" adolescents. A study by Hetherington, Stouwie and Ridberg (1984) utilized incarcerated delinquents. They investigated parental attitudes related to

different types of delinquency in boys and girls. Their results showed a similar association between parental attitudes and delinquency type for both sexes, although the relationships were clearer for boys. For girls, aggressive delinquency was associated with families characterized by less warmth, paternal rejection, inconsistent discipline and ineffectual maternal discipline. Nonaggressive delinquent females were more likely to have the most permissive families.

Thus, the literature provides mixed support for a link between different family factors and specific types of delinquency, with the evidence for such a connection being somewhat stronger for males than females.

The Contribution of Family Factors

While family variables are significant, research shows they account for only a small to moderate amount of the variance in delinquent behavior. This indicates that other factors need to be considered when trying to understand the causes of delinquency. Indeed, most researchers would agree that delinquency has multiple causes, and there is an increasing call for multivariate research and integrated theories of delinquency. As noted earlier, several integrated theories (e.g., Elliot, Huizinga & Ageton, 1985; Fagan & Wexler, 1987; Patterson, 1982), have combined social control, learning and occasionally a third theory. These integrated theories usually include extrafamilial factors (e.g., type of friends, opportunities for goal achievement) in their

explanations. Few family studies, however, also consider the importance of individual cognitive factors in relation to delinquency. This is despite the fact that such individual factors as low verbal intelligence, immature moral reasoning, attributional biases and low self-esteem have been significantly associated with delinquency (see reviews by Henggeler, 1989; Hetherington & Martin, 1986). The following section presents two other cognitive aspects of personality also found to be related to delinquent behavior.

Personality and Delinquency

Cognitive theories of delinquency tend to focus on deficits in social-cognitive functions and skills (e.g., role-taking ability, empathy, attributions, moral and social reasoning) as leading to delinquent behavior. Two personality characteristics (as based on cognitive theories), found to be associated with delinquent behavior are level of ego development and degree of socialization. Each of these factors is more fully described below.

Socialization has been understood to mean different things by different people. One meaning of socialization is the process by which individuals learn the ways of the community or society so that they can function within it (Stein, Gough & Sarbin, 1970). Socialization is a product of social interaction and depends on the capacity to see oneself from the perspective of others as well as to take the role of the other. At the most fundamental level, socialization reflects role-taking ability. Varying degrees of role-taking ability are manifested in different behaviors and reactions which are considered more or less socialized. Socialization occurs along a continuum, ranging from a completely asocial attitude on the one end to outstanding rectitude on the other. Delinquency appears to result in part from inadequate socialization (Snyder & Patterson, 1987). Delinquents and criminals tend to place on the lower end of

this continuum (Gough, 1969), and degree of socialization successfully differentiates delinquents from nondelinquents (See review by Megargee, 1972). In addition, degree of socialization has been found to discriminate subtypes of male offenders. For example, Donald (1960, cited in Megargee, 1972) found that inmates convicted of moonshining were better socialized than those incarcerated for other offenses. Less socialized offenders are also more likely to be recidivists (Deardorf, et al. 1970; Peterson, et al. 1959), to commit more serious offenses (Donald, 1955, cited in Gough, 1969) and to be more frequent offenders (Knapp, 1963, 1964).

Findings regarding the association between violence and socialization are inconsistent. Two studies (Heilbrun, 1979; Sarbin, Wenk & Sherwood, 1968) found that low socialization in combination with other factors increased the likelihood of violent offenses. Two other studies (Megargee, 1964; Wilcock, 1964; cited in Megargee, 1972) comparing assaultive and nonassaultive criminals found greater socialization among the violent group. A possible explanation for this inconsistency is that some assaultive individuals are characterized by greater inhibitions and controls which may in part be reflected in greater socialization (Megargee, 1972). Differences in socialization also provide discriminations within nondelinquent samples in the expected ways (Gough, 1969; Megargee, 1972). For instance, lower degrees of socialization are associated with self-reported

criminal behavior in male and female college students (Siegman, 1962) and male adolescents (Hindelang, 1972), and with disciplinary problems in high school males (Stein et al, 1966).

In Jane Loevinger's (1976) cognitive-structural model of the ego (or self), socialization is related to but encompassed by the larger process of ego development. Ego development refers to the ways each person actively interprets and organizes his/her world, including self and others. Ego is both the process of organizing experience and the framework around which experience is organized. Ego development occurs via the individual's reciprocal interactions with the external world, particularly the interpersonal one. Development proceeds through a series of hierarchical invariant stages (seven stages and three transitional phases) that become increasingly differentiated and complex. These stages are divided into the preconformist, conformist and postconformist levels. The stages, or frameworks, are qualitatively different from one another. In the course of development, changes occur in the various interwoven facets of the ego. These facets include interpersonal style, impulse control/moral style, conscious preoccupations and cognitive style. Thus, each stage corresponds to a particular character style associated with specific patterns of reasoning and behavior and orientations to self, other and world. (See Table 1). Individuals'

behavior is assumed to be comprehensible within the context of their ego stage and thus delinquent behavior is viewed as making sense within the context of delinquents' ego stages.

Table 1
Milestones of ego development

STAGE	IMPULSE CONTROL	INTERPERSONAL STYLE	CONSCIOUS PREOCCUPATIONS
Presocial/ Symbiotic		Autistic, symbiotic	Self vs. non-self
Impulsive I-2	Impulsive, fear of retaliation	Dependent, exploitative	Bodily feelings
Self- Protective delta	Opportunistic, fear of being caught	Manipulative, exploitative	Self-protection, advantage, control
Conformist I-3	Conformity to external rules	Belonging, superficial niceness	Appearance, social acceptability
Self-Aware I-3/4	Differentiation of norms, goals	Aware of self in relation to group	Adjustment, reasons, problems
Conscien- tious I-4	Self-evaluated standards, self-criticism	Intensive, responsible	Motives, self-respect
Individual- istic I-4/5	Respect for individuality	Dependence as an emotional problem	Differentiation of inner from outer life
Autonomous I-5	Coping with conflict, toleration	Respect for autonomy, inter- dependence	Role conception, self in social context
Integrated I-6	Reconciling inner conflicts	Cherishing of individuality	Identity

Note: Adapted from Gold (1980)

Two of the lowest ego stages seem to closely correspond to descriptions of delinquent character styles. These are the I-2 (Impulsive) stage and the next highest stage, the delta (Self-protective) stage. The remaining stages seem to have little association with delinquency. I-2 individuals are impulsive and present-oriented. They need external restraints in order to control their impulsivity. They are preoccupied with bodily impulses, such as sex and aggression, and feel emotions intensely, almost physiologically. They are insistently dependent on others and value people in terms of what can be gotten from them. They avoid responsibility for problems. Some may be overtly self-destructive. Individuals who are pathologically expressing the I-2 stage may be labeled by others as "incorrigible", "uncontrollable" or a "hot psychopath".

Delta individuals, at the next highest level, have greater impulse control and better ability to delay gratification than their I-2 counterparts. They can anticipate short-term rewards and punishments and understand rules. Deltas obey rules in order to avoid punishment and they use them for self-protection and to further their own ends. They are less dependent on people and view relationships primarily in terms of control and advantage. They externalize blame and are opportunistic and deceptive.

Pathological delta individuals may be seen as "cool psychopaths".

Links have been found between ego development and psychopathology and maladaptive behaviors, including delinquency/criminality. Psychopathology/maladjustment occurs at every ego stage but it tends to occur more frequently at lower ego stages (Frank & Quinlan, 1976; Gold, 1980; Hauser et al, 1983; Waugh & McCaulley, 1981). Also, while the results are somewhat inconsistent, it seems to be expressed differently at different stages (Noam, Hauser, Santostefano, Garrison, Jacobson & Powers, 1984). For example, Gold (1980) found hypochondriasis, hysteria and paranoia to be most closely associated with the preconformist, conformist and postconformist stages respectively. Vincent and Vincent (1979) discovered that adult psychiatric patients with characterological disorders were most apt to fall at the self-protective stage while neurotic, psychotic and indeterminate individuals tended to fall above this stage. Certain behaviors, behavior patterns and interpersonal capacities are also differentially associated with ego stages. Male and female college students at lower ego stages are less empathic than those at higher levels (Carlozzi, Gaa, & Liberman, 1983). Fighting, running away and homosexual involvement are more frequent at the I-2 than delta stage (Frank & Quinlan, 1976), and assaults, accidents and suicide attempts (Browning, 1986), impulsivity (Kishton, Starett & Lucas, 1984), and externalizing behaviors such as arguing, destroying things and hitting others (Noam, et al., 1984) occur more often at

lower stages. By studying the relationship between ego stage and type of federal offense for imprisoned young adult males, Powitzky (1976) found the following offense hierarchy in order of increasing ego stage: Dyer Act (serious crimes) offenders, bank robbers, opiate offenders, marijuana offenders, embezzlers and conscientious objectors. Embezzlers and conscientious objectors were roughly equivalent in ego stage. Ward-Hull (1981) found female delinquents to be at lower ego levels than nondelinquents, though this was true only for black and not white girls. Thus, evidence links delinquency/criminality to lower ego stages but no research has yet attempted to discover if different patterns of delinquency are related to specific stages. The available evidence seems to suggest, however, that overt/aggressive behaviors are more likely to occur at the I-2 stage while covert/nonaggressive patterns of behavior are more likely to occur at the delta stage.

One difficulty in interpreting the connection between ego development and delinquency/criminality, however, is the finding that intelligence is correlated with both ego development and delinquency/criminality, though typically in opposite ways. There appears to be strong evidence that, at least in officially delinquent populations, low intelligence (deficits of verbal IQ in particular), predispose people to offending (Wilson & Herrnstein, 1985). Wilson and Herrnstein (1985) cite research indicating that low verbal IQ is

associated with recidivism, aggressive crime and impulsive crimes with immediate rewards. They go on to suggest that one way intelligence may affect crime is via its correlates. That is, verbal IQ has been shown to be inversely related to a variety of individual traits that might predispose a person to delinquent/criminal behaviors. These traits include levels of moral development and interpersonal maturity, social competence, unconventional and antisocial attitudes, and present orientation.

While not cited by Wilson and Herrnstein, ego development is frequently (though not always) positively associated with intelligence (Hauser, 1976; Loevinger, 1979; Vincent & Vincent, 1979). Individuals at higher ego levels typically demonstrate greater intelligence. The meaning of this relationship remains unclear, however. Attainment of certain levels of intelligence may be a prerequisite for reaching higher stages of ego development, or, conversely, achievement of higher ego stages may facilitate the growth of intellectual capacities (Hauser, 1976). After reviewing the literature, Loevinger (1979) concludes that ego development is not merely intelligence since some studies show relationships that can be accounted for better by ego development than by intelligence alone. Evidence suggests that there is a relationship between aggression/delinquency and ego development that is independent of intelligence. For example, the links between fighting and lower ego stages

(Frank & Quinlan, 1976) and between problem behaviors (e.g., assaults, suicide attempts, self-inflicted injuries, injuries resulting from punching a wall, door or window) and lower stages (Browning, 1986) remained even after controlling for intelligence. Furthermore, in Powitzky's study (1976) of ego development and type of federal offense, there was no relationship between Beta IQ and ego level.

Earlier, it was noted that the family is viewed as being important to the development of delinquency. Ego development, which is social in origin and the product of the interaction between the individual and the particular climate and subculture to which he/she belongs, might also be expected to be affected by family environment and family interactions. Behavioral ratings of parental acceptance, empathy and a problem solving style of interaction have been linked to higher ego levels (Hauser et al, 1984), as has a family environment that is cohesive while encouraging self-sufficiency, is expressive of feelings, and is organized without being rigidly controlled (Bell & Bell, 1982). Powers, Hauser, Schwartz, Noam & Jacobson, (1983) found that high levels of adolescent ego development were associated with families that engaged in a large amount of noncompetitive perspective sharing or challenging behavior within a highly supportive or conflict free context. In contrast, family interaction patterns associated with lower levels of adolescent ego development were characterized by the highest

amount of cognitively inhibiting behaviors and affective conflict. Bakken and Romig (1989) examined family functioning and ego development in male and female high school students. They found that families with high levels of adaptability (the ability of the family to change its rules and roles when necessary) had adolescents with higher levels of ego development. Family cohesion (the emotional bonding between members) was important to ego development only in combination with adaptability. Families high in adaptability and low in cohesion were most conducive to ego development.

While concurrent studies support a relationship between family factors and ego development, longitudinal ones present a mixed picture. Gfellner (1986) assessed the relationship between adolescent ego development and three dimensions of parenting style. These dimensions were loving (an affectionate, supportive, nurturant and affirmative parenting style), punishment (the use of physical or nonphysical punishment without concern for the child's feelings or needs) and demanding (a controlling, protective, and intrusive parenting style). Her male and female subjects were first assessed as 12-14 year olds and again assessed 4 years later. Perception of parenting styles was only obtained during the second data collection period, however. The adolescents' reports were of earlier rather than current parenting behaviors. She found an association between parenting dimensions and ego development for early but not late

adolescents. Further, these effects differed for boys and girls. Specifically, her results showed that the loving dimension related to higher ego development in girls and lower in boys. Conversely, the demanding dimension related to higher ego development in boys and lower in girls. Another longitudinal study was carried out by Dubow, Huesmann and Eron (1987). The ego development level of 398 adults (206 females, 192 males), ages 30-31, was analyzed in relation to information collected when they were third graders and again when they were 19. Among the information gathered were self-report measures of parents' levels of authoritarian punishment, rejection of the child, nurturance toward the child and the extent of the child's identification with parents. Correlational analyses indicated that child-rearing styles characterized by acceptance, the use of nonauthoritarian punishment and identification of the child with the parent were related to higher levels of ego development for females 22 years later. Only authoritarian punishment was found to have a significant negative relation to boys' later ego development. However, hierarchical multiple regression analyses showed that parenting variables contributed negligible predictive ability beyond that of SES indicators, IQ and knowledge of the child's behavioral style at age 8 (e.g. prosocial or aggressive).

In sum, the available evidence suggests that family functioning and ego development are associated, though perhaps

differently for males and females. The association may be stronger for the earlier in comparison to the later adolescent and the adult years. As Gfeller (1986) suggests, this may be because the adolescent has an increasingly expanding social milieu with more opportunities for role taking and interaction. Thus, extrafamilial influences on ego development become more important as the adolescent grows older.

Family Factors, Socialization, Ego Development and Delinquency

Each of the theories described in this paper has a somewhat different yet complementary perspective to offer on delinquency. Control and coercion theory both place great importance on family attributes, with control theorists emphasizing parent-child attachment and the factors establishing and maintaining it and coercion theorists emphasizing the importance of parental control and discipline strategies in addition to the quality of family relationships. Cognitive-structural theory, by postulating that development occurs via individuals interactions with their environment (Loevinger, 1976), implicitly accepts the importance of family attributes in relation to delinquency. What cognitive theories add to the other two theories is greater specification of and emphasis on the contribution of individual cognitive factors to delinquent behaviors.

Each theory, on its own, is insufficient in explaining delinquency. However, as others have demonstrated,

integrating several theories can be quite fruitful. Integrating elements of the above theories suggests that the quality of family relationships, parental control strategies, degree of socialization and level of ego development are important factors in understanding delinquency. However, the importance of each of these factors (relative to each other) and possible sex differences must also be considered.

Theoretically, family factors are assumed to be important contributors to socialization, ego development and delinquency and the literature generally supports this. In addition, research shows that family characteristics associated with nondelinquency are also related to higher ego development. This suggests that family characteristics may have both direct and indirect effects (via socialization and ego development) on delinquency. (See Figure 1). Does this mean that family factors are more important than personality factors in explaining delinquency? Not necessarily. A major developmental task of adolescence is that of becoming more independent from the family. As the adolescent's independence increases, the family's influence on him/her wanes. Therefore, it is hypothesized that extrafamilial factors (e.g., personality) become relatively more directly important in explaining deviant behavior as the child moves into and through adolescence.

As noted earlier, research regarding sex differences in the association between family factors and delinquency, and

between family factors and types of delinquent behavior is inconclusive. The present study focuses on factors related to aggressive delinquency. Since the research does not conclusively support sex differences in this area, this study assumes that, with the possible exception of physical abuse, there are none. That is, the same factors associated with aggressive delinquency in males are expected to be associated with aggression in females.

With respect to socialization and ego development, little work has been done addressing sex differences in family influences on the development of these personality factors. A recent study (Gfellner, 1986) suggests that an affectionate, nurturant, supportive and helpful parenting style relates to higher ego development in girls while a more demanding style is related to higher ego development in boys. If family factors do have an indirect effect via ego stage, this seems to imply that attachment variables play a stronger role in female than male delinquency. However, there is insufficient evidence in the ego development literature to indicate that different parenting styles are indirectly related to different types of delinquent behavior.

This study examines family and personality characteristics emphasized by the various theories described earlier and their relation to delinquency. Specifically, it assesses the affective quality (degrees of cohesion, attachment, conflict, violence) of the family system, the

affective quality of individual parent-child relations, the rigidity of and type of family organization-control structure, degree of socialization and level of ego development. It is hypothesized that these factors are differentially related to aggressive and nonaggressive patterns of female delinquency. Further, it is postulated that different family characteristics are associated with different levels of ego development and socialization which, in turn, are associated with different patterns of delinquency. The specific hypotheses are as follows.

Hypotheses

1. Overt/aggressive behavior will be associated with a distinct type of family environment. Aggressive behavior is expected to be positively associated with:
 - a. Higher levels of family conflict.
 - b. Extreme levels of family cohesion.
 - c. Lower levels of organization and control.
 - d. Less family emphasis on the personal growth of family members.
 - e. A greater likelihood of having been physically abused.
2. Overt/aggressive behavior will be negatively associated with level of ego development.
3. Overt/aggressive behavior will be negatively associated with degree of socialization.

4. Family factors are expected to have both indirect and direct effects on delinquency, but the direct effects of personality factors are expected to be greater.

In addition, the study explores differences in history of sexual abuse among the two groups. There is no specific hypothesis about this, however.

These hypotheses are explored using a sample of incarcerated female delinquents. Though using such a population has disadvantages (e.g., generalizability to non-incarcerated populations), it also has the important advantage (to this study) of including more girls who have committed serious and aggressive delinquent acts than is typically present in the general population.

CHAPTER II

METHOD

Subjects

The subjects were 51 adolescent females residing in a state correctional facility in the Midwest. This is the only such facility for females in the state. Demographic information was available for 48 of the girls. Within this group, 52% were white, 40% were black, and 2% were Hispanic. The girls' ages ranged from 14 to 19 (mean = 16.6, s.d. = 1.13; median = 16.5). Age at first offense ranged from 9 to 16 (mean = 13.5, s.d. = 1.47). The average number of arrests per girl was 10.41 (SD = 9.2). Socioeconomic data indicated that the majority of the girls came from the lower middle and lower classes as determined by the head of the household's educational attainment and occupation (the Hollingshead system). Only one girl came from an intact (i.e., both parents) family. Approximately equal numbers of subjects came from urban and rural areas. Data for this study was gathered in the course of a larger project assessing the mental health needs of incarcerated adolescents. As participants in this project, subjects completed a series of self report measures and participated in an individual structured interview with

one of the researchers.

Measures

Delinquency Checklist (DCL; Kulik et al., 1968). This self-report instrument assesses type and frequency of delinquent behavior listing 51 different behaviors ranging in severity from mild misbehavior to seriously antisocial acts. Subjects indicate on a 5 point scale whether they have "never" engaged in the activity or committed it "once or twice", "several" times, "often" or "very often". The instrument has 4 scales: Assaultiveness, Parental Defiance, Drug Usage, and Delinquent Role with alpha reliabilities of .88, .78, .92 and .95 respectively. Correlations between scales range from .20 to .71. The scales have been found to differentiate between delinquent and nondelinquent groups and between different subtypes of delinquent boys.

Youth Self Report (YSR; Achenbach & Edelbrock, 1981). A 112 item self-rating scale for youths aged 11 - 18. It assesses specific behavioral syndromes including aggression and delinquency. Self-ratings by nonreferred adolescents show a median test-retest reliability of .81 at 1 week and .51 at 8 months for all YSR scales computed separately for each sex. Test-retest correlations for girls on the aggressive and delinquent subscales are .85 and .94 respectively at one week, and .64 and .70 at 8 months. The scales have been shown to differentiate teens referred for clinical help from those who are not.

Spectrum of Assaultive Behavior Scale (SABS; Pfeffer et al., 1983). Interviewer rating scale assessing severity of aggressive behavior during 3 different periods: birth to six months; six months prior to last week; and last week. For each period, subjects' behavior is rated on a scale ranging from 1 (nonassaultive) to 6 (homicidal). Some examples of classification definitions are: 1 (nonassaultive): no evidence of assaultive behavior or ideas; 2 (assaultive ideation): "I wish you were dead"; 3 (assaultive threat): child reports he will hurt or kill someone; 4 (mild assaultive attempt): child hits, burns, pushes, trips or throws objects at someone; 5 (serious assaultive attempt): child cuts someone with a knife and sutures are required; 6 (homicide): child beats infant sibling until sibling dies. Reported interrater agreement is 96%.

Family Environment Scale (FES; Moos, et al., 1981). A self-report measure of relationship (cohesion, expressiveness and conflict subscales), personal growth (independence, achievement-orientation, intellectual-cultural orientation, active-recreational orientation and moral-religious emphasis subscales) and system maintenance (organization and control subscales) dimensions of family functions. The instrument consists of 90 true-false items. Reported internal consistency coefficients range from .64 to .78, item-to-subscale coefficients range from .45 to .58 and eight week test-retest reliabilities range from .68 to .86.

Interscale correlation coefficients average .20. FES subscales have been shown to consistently discriminate between normal and disturbed families and to be sensitive to changes in families during therapy (See review by Anderson, 1984).

Family Adaptability and Cohesion Evaluation Scale (FACES III; Olson, Portner & Bell, 1985). A 40 item self-report measure of family cohesion (the emotional bonding that family members have toward one another) and family adaptability. The adaptability dimension includes the specific concepts of family power (assertiveness, control, discipline), negotiation style, role relationships and relationship rules. It refers to the capacity of the family to change these elements as needed. The scale yields both categorical (type of family) and linear scores. It assesses current perceptions of the family (20 items) as well as how subjects would like their families to be (20 items). The authors report internal consistency coefficients of .77 for cohesion and .62 for adaptability. Intercorrelation between adaptability and cohesion is .03. The instrument discriminates delinquent from nondelinquent families (Rodick, et al, 1986) and clinic from nonclinic families (See review by Olson, 1986).

Relationship with Mother Scale (adapted from Blyth, 1982). A 9 item self-report measure of adolescents' perceived closeness to their mothers and amount of time spent with mothers. Reported internal reliabilities for the two

subscales (i.e., closeness and contact) are .83 and .71 respectively.

Relationship with Father Scale (adapted from Blyth, 1982). This 9 item scale is equivalent to that used to assess adolescents' relationships to their mothers (see above). Reported internal reliabilities are .88 for the closeness subscale and .84 for the contact subscale.

Socialization Scale of the California Psychological Inventory (SO; Gough, 1960, 1969). This self-report instrument consisting of 54 true-false items assesses the degree to which the mandates and constraints of the culture have been effectively internalized. The instrument yields continuous scores. Construct, concurrent and predictive validity are satisfactory (Megargee, 1972). It demonstrates adequate validity in distinguishing both male and female groups classified as more or less socialized (Gough, 1975) and discriminating degrees of asocial behavior within designated groups (Rosen, 1977). Cross-cultural validity also appears adequate (Gough, 1965). The scale is reported to not be significantly influenced by intelligence level, age, SES, social desirability and race (Megargee, 1972; Stein et al, 1966). Test-retest reliabilities range from .65 to .80.

The Socialization scale can be divided into measures of positive interpersonal experiences (SO_Posex), conformity and observance of convention (SO_Conform), evaluation anxiety (SO_Anxiety), low self-regard (SO_Self), and poise versus

dysphoric moods and paranoid attitudes (SO_Poise) (Rosen & Schalling, 1974).

Sentence Completion Test (SCT; Loevinger & Wessler, 1970). Self-report measure of stages of ego development. The form for females consists of 36 sentence stems. The scoring method classifies subjects according to ego stage. Extensive reviews done by Hauser (1976) and Loevinger (1979) indicate adequate reliability and validity. Test-retest reliabilities for high school students range from .79 to .91, internal consistency coefficients range from .80 to .91, and split half reliability is equal to .90. It yields linear (Total Protocol Ratings) and continuous scores (item sum).

This researcher scored the SCT in the standard manner after completing the self-training method developed by Loevinger, Wessler and Redmore (1970). Agreement with practice protocols in the scoring manual was comparable with that reported by the authors. Exact item rating agreement between this rater and the practice protocols was 87%. There was 96% agreement of items within one half step (i.e., one score was at one of the main stages and the other was at an adjacent transitional level). Percentage of agreement between total protocol ratings (TPRs) was 80%. There was 95% agreement of TPRs within one half step. Both TPRs and item sum ratings were obtained for each SCT used in this study.

The remaining self-report instruments were scored according to standardized procedures.

The relevant concepts and measures used to assess them are illustrated in the following table.

Table 2
Measures

CONSTRUCT	MEASURE
Pattern of delinquency	DCL - Assaultiveness Scale YSR - Aggression Scale Spectrum of Aggressive
Behavior Scale	
Cohesion/Attachment	FES - Cohesion Subscale FES - Expressiveness Subscale FES - Personal Growth FACES - Cohesion Factor Relationship with Mother Scale Relationship with Father Scale
Organization-Control	FES - Organization Subscale FES - Control Subscale FACES - Adaptability Factor
Family Discord	FES - Conflict Subscale DCL - Parental Defiance Scale History of physical abuse History of sexual abuse
Degree of socialization	Socialization Scale of the California Psychological Inventory
Ego Stage	Sentence Completion Test

Procedure

Potential subjects were informed of the larger study by a correctional facility staff member. Written consent was obtained by a clinical researcher (a registered clinical psychologist or post-internship clinical psychology graduate student) from each girl willing to participate in the study. These researchers administered the self-report instruments in the course of 2 sessions to groups of 5-6 adolescents at a time. Subjects were instructed to follow the directions printed on each measure. Researchers answered subjects' questions about the forms, clarified items when necessary and occasionally read items to subjects at lower educational or intellectual functioning levels. Interview data were used to complete several interviewer rating scales. Family demographic data and history of sexual and physical abuse were gathered during the interviews and through review of records. The self-report instruments, interviewer ratings of aggressiveness, and subjects' and official reports of abuse were used to determine patterns of delinquent behavior, family climate and characteristics, ego development and socialization.

CHAPTER III

RESULTS

Cronbach alphas were computed for each measure used in the study in order to determine their internal consistencies. Those measures with unacceptable alphas for this sample (alpha < .70) were discarded. The following measures remained: the YSR Aggression scale; the Assaultiveness and Parental Defiance subscales from the DCL; the SABS ratings; the Cohesion, Conflict, Moral-Religious Orientation, and Organization subscales of the FES; the Cohesion subscale from FACES; the Contact and Attachment subscales of the Relationship with Mother and with Father scales; the Socialization Scale and the SCT (see Table 3). In order to determine whether composite measures of different aspects of family functioning could be established (and used in subsequent analyses), the family functioning subscales were factor analyzed. An oblique rotation was used to allow for correlated factors. Mean scores were substituted for missing data. The resulting three factor solution is shown in Table 4. The first factor appears to reflect harmonious family functioning. This harmony is represented by a lack of family conflict, a sense of emotional bonding with family members, orderly family functioning and an orientation to moral and religious behavior. The second

Table 3
Variables Included in Final Analyses

Dependent Measures

YSR Aggression
DCL Assaultiveness
SABS Six Month Ratings

Independent Measures

Family Functioning

DCL Parental Defiance
FES Conflict
 Moral-Religious Orientation
 Organization
 Cohesion
FACES Cohesion

Parent-Child Relationships

Father Contact
Father Attachment
Mother Contact
Mother Attachment

Personality Functioning

Socialization Scale
Sentence Completion Test

Table 4
Factor Solution for Family Functioning Measures

	FACTOR 1	FACTOR 2	FACTOR 3
FES Conflict	-.8255	-.0663	-.0445
Parental Defiance	-.7905	-.1152	.2436
FES Moral	.7532	-.2251	.1682
FACES Cohesion	.6610	.1905	.2755
FES Organization	.5534	.1493	.2142
Father Attachment	.0914	.9259	-.0701
Father Contact	-.0526	.8974	.1625
Mother Contact	-.1016	.0607	.9441
Mother Attachment	.1984	.1134	.7916
FES Cohesion	.4524	-.0140	.5803

factor seems to assess the father-daughter relationship. The construct underlying the third factor is less clear but seems to represent the mother-child relationship and, to a lesser extent, the sense of emotional closeness in the family as a whole. Since the literature shows that the quality of parent-child relationships can differ from the quality of the family environment, it was decided to separate the measures of mother-child and father-child relationships from the other measures. (While the Parental Defiance Scale assesses conflict between parent and child, it does not distinguish between mother-child and father-child conflict and was therefore included with the family scales). Factor analysis of these other measures resulted in a one factor solution, providing support for distinguishing between parent-child and family measures. This factor appears to reflect different aspects of family functioning and, for conceptual reasons, was divided into those subscales with positive and with negative loadings on the factor. Combining the standardized scores of the subscales with positive loadings yielded a measure labeled Closeness (because it included the two cohesion measures). Combining the standardized scores of those with negative loadings created a measure of conflict in the family (Conflict). The subscales of the Relationship with Mother and with Father subscales were added together to produce Mother and Father Scales. Reliability analyses revealed satisfactory

alphas for Closeness, $\alpha = .85$; Mother, $\alpha = .94$; and Father, $\alpha = .94$. The two subscales making up Conflict have a correlation of $.51$, $p < .0001$.

An Aggression (Agg) score was calculated for each subject as the sum of each girl's standardized scores on the DCL Assaultiveness Scale (frequency of seriously aggressive acts) and the YSR Aggression Scale (frequency of more minor but still overtly confrontive behaviors). The Spectrum of Assaultive Behavior Scale (SABS) ratings showed low correlations with the YSR and DCL aggression measures and therefore were not combined with them. The SABS rating of severity of aggressive behavior in the 6 months prior to incarceration was kept as an additional measure of assaultiveness and the other SABS ratings were discarded. The 6 month rating was chosen over the other 2 ratings (i.e., from birth to 6 months before incarceration; 1 week prior to the interview) because it reflected recent aggression and the behavior rated seemed less likely to be inhibited by the restraints of incarceration.

Analyses

Descriptive statistics for the girls on each of the measures are presented in Table 5. The percentages of girls physically and/or sexually abused are also presented. Relative to normal samples of adolescent females, these girls are significantly more aggressive/confrontive (YSR; Achenbach & Edlebrock, 1987), less socialized (Gough, 1969) and are at

Table 5
Descriptive Statistics for All Subjects on Dependent and Independent Measures-Composite Scales and Subscales (N=51)

<u>SCALE</u>	<u>MEAN</u>	<u>SD</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>
Aggression ^a	.02	1.66	-3.09	3.59
YSR	17.86	6.74	2.00	28.00
DCL	4.50	6.14	.00	20.00
SABS	3.51	1.35	1.00	6.00
Closeness ^a	.14	3.23	-7.37	5.73
FACES Cohesion	29.73	9.54	10.00	50.00
FES Cohesion	5.74	2.17	1.00	9.00
FES Moral	5.17	2.12	1.00	9.00
FES Organization	5.96	2.18	1.00	9.00
Conflict ^a	-.03	1.75	-2.86	3.83
Parental Defiance	8.80	5.34	.00	20.00
FES Conflict	4.83	2.41	1.00	9.00
Father ^b	24.33	11.78	9.00	42.00
Father Contact	7.57	3.95	3.00	15.00
Father Attachment	16.50	8.40	6.00	30.00
Mother ^b	31.17	11.55	9.00	47.00
Mother Contact	10.05	4.37	3.00	17.00
Mother Attachment	20.81	7.71	6.00	30.00
Socialization	25.43	8.21	-9.00	34.27
Ego	129.89	19.24	99.00	171.00

Percentage of girls sexually abused: 47.1%

Percentage of girls physically abused: 39.2%

Note: Higher scores indicate a higher degree of the variable being measured.

^a Indicates a composite measure that is the sum of the standardized scores on the subscales directly below it.

^b Indicates a composite measure that is the sum of scores on the subscales directly beneath it.

lower stages of ego development (SCT; Hauser et al, 1984). Norms for normal adolescent females were unavailable for the other measures. Relative to the mean scores of a stratified random sample of 515 families with adolescents, these girls perceive their families as less cohesive (FACES; Olson, Portner & Bell, 1985). However, these delinquents did not score significantly differently on any of the FES subscales when compared to 285 mostly middle class families (Moos et al, 1974). They demonstrated significantly greater assaultiveness (DCL) and more parental defiance than nondelinquent boys (Kulik et al, 1968). Comparative data for the SABS and for the parent-child relationship forms were unavailable.

Data were analyzed to determine whether subjects' age, SES, parent's marital status, or race showed differential associations with aggressive behavior, ego development, socialization or any of the family characteristics. SES and the SABS score demonstrated a significant positive correlation and analyses of variance revealed race and SES to be confounded. Therefore SES was controlled in the relevant analyses. Correlations of the aggression measures with the measures of family and personality functioning are shown in Table 6.

According to hypotheses, stepwise multiple regression analyses were conducted looking at aggressive behavior as a function of family functioning, parent-child relationships,

Table 6
Correlations Between Aggression Measures and Measures of
Family and Personality Functioning

SCALE	AGG	SABS
Closeness	-.35*	.15
Conflict	.47**	-.20
Father	-.07	.20
Mother	-.12	.25
Ego Level	-.20	-.11
Socialization	-.39**	-.11

Note: Because of missing data, the number of subjects for correlations with AGG ranged from 42-47; for SABS they ranged from 38 to 41.

* $p < .05$

** $p < .01$

ego development (SCT item sum scores), and socialization (SO scores). These analyses were conducted in a hierarchical fashion. That is, the initial analyses used the composite measures of family functioning and the 2 measures of personality functioning. When a composite measure was identified as a significant predictor, post hoc analyses employed the subscales of that measure. These analyses were done for generalized aggression (Agg) and rated severity of assaultiveness (SABS). In addition, while no hypotheses were made regarding racial differences, African-American and Caucasian girls showed different patterns of association between several of the dependent and independent measures (see Table 7). Therefore, separate post hoc regression analyses were computed for African-American ($n = 19$) and white ($n = 25$) females. There were not enough Hispanic subjects (i.e. $n = 3$) to include them in these analyses.

Table 8 shows the means and standard deviations on the dependent and independent measures for white and African-American girls. The results of analyses of covariance (controlling for SES) reveal that white girls demonstrated significantly greater parental defiance, $F(1, 31) = 9.59$, $p < .005$, than did African-American teens. In addition, white girls tended to report less socialization ($p < .10$), to perceive their families as more conflictual ($p < .09$), and to experience their families as less cohesive ($p < .07$).

Table 8
Scale and Subscale Means and Standard Deviations for White
and for African-American Teenagers

<u>SCALE</u>	<u>White</u>		<u>African-American</u>	
	<u>MEAN</u>	<u>SD</u>	<u>MEAN</u>	<u>SD</u>
Aggression ^a	.28	1.64	-.28	1.50
YSR	18.67	5.97	17.00	7.13
DCL	5.24	6.35	3.44	5.60
SABS	3.35	1.40	3.69	1.40
Closeness ^a	-.88	3.24	1.35	2.81
FACES Cohesion	26.71	9.45	34.37	8.68
FES Cohesion	5.09	1.98	6.58	2.14
FES Moral	4.70	2.32	5.67	1.53
FES Organization	5.21	2.15	6.74	2.08
Conflict ^a	.69	1.53	-1.00	1.53
Parental Defiance	10.96	4.29	5.42	4.60*
FES Conflict	5.46	2.43	3.89	2.19
Father ^a	22.86	12.83	27.21	10.47
Father Contact	6.64	3.68	8.79	4.25
Father Attachment	15.75	9.14	18.42	7.07
Mother ^a	27.28	10.45	35.24	12.21
Mother Contact	8.87	4.29	11.37	4.52
Mother Attachment	18.01	6.68	23.87	8.18
Socialization	24.88	7.91	28.56	3.27
Ego	134.10	22.34	126.11	16.46

Note: When SES is controlled, only mean degree of parental defiance significantly differs for African-Americans and whites. The other seemingly significant differences disappear. For African-Americans $n = 15-19$; for whites $n = 21-25$.

^a Indicates a composite measure.

* Indicates a significant ($p < .01$) difference.

Correlations and Factor Analyses

Family functioning. As hypothesized, correlational analyses showed that more overtly aggressive females perceived their families to be more conflictual ($p < .01$) and less oriented toward religious-moral issues ($p < .05$) than families of less aggressive females. However, contrary to expectations, aggression was not correlated with greater family cohesion. Rather, aggression was associated with less cohesiveness in the family ($p < .05$). Neither the quality of the mother-daughter nor of the father-daughter relationships were associated with aggression. Also, as hypothesized, analysis of variance showed a trend for aggressive behavior to be greater among physically abused girls, $F(1,3) = 6.86$, $p = .073$.

Racial differences. For white subjects, aggression was positively associated with family conflict ($p < .05$) and, as noted earlier, tended to be associated with physical abuse. Subscale analysis, however, showed that conflict between parent and child ($p < .01$), rather than in the family environment, was significantly related to aggression. Aggression was not related to a history of being sexually abused, closeness among family members, attachment to parents, family organization and family's moral-religious emphasis. The severity of aggressive behavior (SABS) was unrelated to the quality of parent-child relationships or to any aspects of family functioning.

For African-American girls, aggression did not significantly correlate with any of the composite measures of family functioning. Correlational analyses using the family subscales revealed African-American girls' aggression to be negatively associated with family cohesion ($p < .05$) and positively associated with family conflict ($p < .05$). Sexual abuse by a family member was also associated with greater aggressiveness, $F(1, 3) = 18.12$, $p = .005$. These findings differ from those for white girls. Consistent with the results for white subjects, however, there was a tendency for physical abuse to be associated with increased aggression. The SABS ratings of severity of aggression showed a very different relationship to family conflict and closeness than did frequency of aggression. That is, severity of aggression for African-American girls correlated with less family conflict ($p < .01$) (both in the family environment and between parent and child) and showed a trend towards being related to greater attachment to the family ($p = .05$).

Socialization. The hypotheses stated that overt aggression would be associated with less socialization. This was true for the sample as a whole ($p < .01$) and for white girls ($p < .01$). No significant relation between aggression and socialization was found for African-American teens. Post hoc analyses evaluating the relative importance of the 5 subcomponents of socialization to aggression indicated that for both white girls ($p < .01$) and the sample as a whole (p

< .01), conformity to societal standards for behavior was the only component significantly related to aggression (not in table).

Ego development. It was proposed that overtly aggressive delinquent behavior would be associated with lower levels of ego development. This hypothesis was not supported. Level of ego development was not related to aggressive delinquency.

Multiple Regression Analyses

Family functioning, personality variables and delinquency. The final hypothesis stated that a combination of family and personality variables would best predict aggressive delinquent behavior. Consistent with this, stepwise multiple regression analyses revealed that family conflict (beta = .43) and lack of socialization (beta = -.35) predicted aggression in the sample as a whole, $R^2 = .33$, $F(2, 48) = 11.92$, $p < .0001$. A post hoc regression analysis using the subscales of the Conflict and Socialization measures showed that parent-child conflict (beta = .40) and failure to conform to societal rules (beta = -.29) best predicted aggression, $R^2 = .30$, $F(3, 47) = 10.20$, $p < .005$ (Table 9).

Data were also analyzed to determine which family factors might indirectly predict aggression via personality functioning. Results showed that parent-child conflict (beta = -.68) and a conflictual family environment (beta = .45)

indirectly contributed to aggression via socialization, $R^2 = .32$, $F(2, 32) = 7.42$, $p < .005$. The direction of the family environment's contribution is somewhat puzzling, however. That is, girls who perceived their families as more conflictual also reported a greater degree of socialization.

Racial differences. Results for African-American and Caucasian girls are shown in Table 10. Post hoc multiple regression analyses provided similar results for white girls as they did for the entire sample. That is, lack of socialization (beta = $-.51$) combined with perceived conflict (beta = $.39$) predicted aggression for white females, $R^2 = .40$, $F(2, 22) = 7.39$, $p < .0005$. For African-Americans a conflictual family environment (beta = $.50$) and past sexual abuse (beta = $.44$) predicted aggression, $R^2 = .43$, $F(2, 16) = 5.92$, $p < .05$.

Spectrum of Assaultive Behavior Scale (SABS) ratings. Multiple regression analyses revealed few significant findings when predicting rated severity of aggression. Socioeconomic status (beta = $.39$) was the only predictor for the entire sample, $R^2 = .15$, $F(1, 49) = 8.84$, $p < .005$ (see Table 9). For African-American teenagers, low SES (beta = $.52$) and a positive relationship with mother (beta = $.46$) predicted severity of assaultiveness, $R^2 = .48$, $F(2, 16) = 7.4$, $p < .01$ (Table 10). None of the family, personality or demographic variables predicted the severity of white females'

Table 9
Stepwise Regressions Explaining Aggression

<u>ALL SUBJECTS</u>					
<u>Dependent Variable</u>	<u>Predictors</u>	<u>R</u>	<u>R²</u>	<u>F</u>	<u>B</u>
Aggression	SES	ns			
	Socialization	.58	.33	11.9**	-.35
	Conflict	.46	.21	13.1**	.43
	Cohesion	ns			
	Rel. w. Father	ns			
	Rel. w. Mother	ns			
	Ego Level	ns			
	Physical Abuse	ns			
Severity of Aggression	SES	.39	.15	8.84**	.39
	Conflict	ns			
	Cohesion	ns			
	Rel. w. Father	ns			
	Rel. w. Mother	ns			
	Socialization	ns			
	Ego Level	ns			

Note: SES was forced into the multiple regression equations.

* $p < .05$
** $p < .01$

assaultiveness.

Interactions among variables. A series of post hoc regression analyses were done to determine whether interactions between different family variables or between family and personality variables helped predict aggression. There were no significant findings.

CHAPTER IV

DISCUSSION

This study shows that distinctive family and personality factors relate to aggression in delinquent girls and that a combination of family and personality factors successfully predicts aggressiveness in these teenagers. Furthermore, different combinations of variables predict aggression for white, for African-American, and for the entire sample of girls. Contrary to other research findings, aggression was unrelated to the quality of parent-child attachments, to extreme family cohesion or to level of ego development.

It must be noted that the hypotheses regarding family organization and aggression were not investigated. This is because 3 of 4 measures assessing family organization/control showed insufficient reliability and the factor analysis indicated that the remaining organization measure did not assess any variance separate from that measured by other aspects of family functioning.

In this study, aggression was conceptualized and measured in two distinct ways. The first assessed the self-reported frequency of both serious aggressive acts (e.g.,

physically aggressive, behaviors (e.g., verbal threats). The second assessed the severity of assaultive behavior within the six months prior to incarceration. These two measures are overlapping but ask conceptually distinct questions. The first asks "How many aggressive and/or confrontative acts were committed?". The second asks "What is the most serious degree of assaultiveness shown in the 6 months before incarceration?". These measures are only mildly correlated and results for the two measures were quite different. This discussion will center on the frequency of aggression unless explicitly stated otherwise.

It is important to note that subjects in this study were not divided into mutually exclusive groups (i.e., aggressive, nonaggressive, mixed) based on types of delinquent behaviors engaged in. A post hoc analysis indicated that aggressive and nonaggressive delinquency were highly correlated in this sample ($p < .00001$). That is, the more aggressive subjects also tended to commit more nonaggressive delinquent acts. Thus, in this study aggressiveness and frequency of delinquent behavior in general are confounded. Therefore, the links found between aggressiveness and family and personality factors may also represent connections between family and personality variables and chronicity (or frequency) of antisocial behavior in general.

Correlations and Factor Analyses

Family functioning. Hypotheses stated that families

of aggressive females would be characterized by high conflict, enmeshment, disorganization, and little control. Aggression was also predicted to be associated with physical abuse. Results provided mixed support for these hypotheses. As predicted, families of aggressive delinquents were more conflictual than families of less aggressive delinquent girls. This is consistent with the literature on family factors related to aggressiveness in delinquent and nondelinquent males (See review by Snyder and Patterson, 1981). Evidence for a link between female aggression and family conflict is mixed, however. Van Voorhis et al, 1988, using a sample of white adolescents from a small midwestern town, found family conflict to be unrelated to fighting. In contrast, Cernkovich and Giordano (1987) found a significant relationship between parent-child conflict and the most serious forms of delinquency for both black and white females from different socioeconomic levels. The only study using incarcerated female delinquents did not directly measure perceptions of family conflict or aggressiveness (Hetherington, Stouwie, Ridberg, 1984). However, results showed that psychopathic delinquents (who tend to be aggressive) were more inappropriately assertive and disruptive in interactions with parents than were socialized delinquent and nondelinquent girls. Thus, findings from the present study are consistent with results for official delinquents and for black and white females from a national sample.

Current findings also indicated that family conflict is associated with aggressiveness for both white and African-American girls. Conflictual parent-child relationships, in which the child openly defies the parent, appeared most significant for white girls while a conflictual family environment correlated with African-American girls' aggressiveness. Possible explanations for these racial differences will be included in a later section discussing the results of the multiple regression analyses.

As expected, results supported the hypothesis that aggressive females are more likely to have experienced physical abuse. The positive association between aggression and past physical abuse approached statistical significance for girls of all races. A recent review of the literature (Koski, 1985) concluded that such a link is uncertain for females. However, physical abuse seemed associated with mixed (both aggressive and nonaggressive) forms of delinquency for girls (Koski, 1985). As noted earlier, aggressive and nonaggressive delinquency were highly correlated in this sample. Thus, the link between aggression and physical abuse found here may also indicate a connection between mixed (or chronic) delinquency and abuse.

No hypotheses were made about the relationship between sexual abuse and female aggressiveness; the literature is scanty on this topic. Although delinquency is frequently linked to sexual abuse, many methodological problems limit the

generalizability of the findings (see review by Browne and Finkelhor, 1986) and studies frequently do not distinguish between aggressive and nonaggressive delinquency. Nevertheless, several findings support a link between aggression and sexual abuse. For example, researchers from Tufts University (1984 cited in Browne and Finkelhor, 1986) identified 23% of sexually abused female adolescents as having elevated scores on a measure of hostility directed outward and almost 50% of the 7-13 year old children in their sample as demonstrating high levels of aggression. In a study of official court cases, DeFrancis (1969) found sexual abuse to be associated with aggressiveness in children.

The current results suggest that aggression and sexual abuse are associated for African-American girls but not for white girls. The literature indicates that victims show a wide range of responses to sexual abuse (Browne & Finkelhor, 1986; Sirles, Smith & Kusama, 1988). While attempts have been made to determine whether specific factors (e.g., duration, severity) related to the abuse are associated with different types of responses, few investigations have examined characteristics of the victims. Research including sex of victim as a relevant variable, however, suggests that abused females (consistent with traditional socialization practices) are more likely to internalize and suffer less noticeable responses such as depression as a consequence of sexual and physical abuse than to externalize and direct aggression

outwardly (Cutler & Nolen-Hoeksema, 1991; Widom, 1989). A possible explanation for the observed racial differences is that white and African-American girls were socialized to respond in different ways. Caucasian females may be more frequently socialized to blame themselves for problems and therefore any anger and hostility felt in response to being abused tends to be directed inward. African-American females may be socialized to externalize blame and/or their open expression of anger may be supported and therefore their angry and hostile responses to the abuse are more frequently directed outwardly in aggressive behavior.

Contrary to prediction, aggression correlated with a sense of distance from the family rather than enmeshment. This prediction was based on theory and research suggesting cohesion operates in a curvilinear fashion and that delinquent families are characterized by extreme (i.e., too high = enmeshed, too low = disconnected) levels of cohesion. Studies discriminating between aggressive and nonaggressive male delinquency provide some evidence that aggressive males come from more excessively cohesive families than nonaggressive males (See review by Snyder and Patterson, 1981). Mixed delinquent (aggressive and nonaggressive) groups, however, tend to come from the most distant families. Again, subjects in this sample were not divided into aggressive and nonaggressive groups and aggression and nonaggressive delinquency were highly correlated. Therefore, current

results may indicate that distance from the family is associated with total frequency of delinquent behaviors and not just aggression.

Another possible explanation is that cohesion actually acts in a linear rather than curvilinear fashion and that lower levels of cohesion are more dysfunctional than either mid- or high levels. Research supports this interpretation (Tolan, 1988). If aggressive delinquency is considered to be more serious than nonaggressive delinquency, the finding that aggressive delinquency is associated with low levels of cohesion is consistent with the idea that more distant families are more dysfunctional.

Different results occurred when attachment to parent(s) rather than attachment to the family as a whole was studied. Contrary to the literature showing disturbed parent-child attachment to be associated with delinquency in males and females, this study failed to find significant correlations between aggressive delinquency and attachment (sense of closeness to and amount of contact with) to either mother or father. An examination of previous studies, however, shows that parent-child attachment is most strongly related to milder forms of delinquency than to serious ones. When the relationship between parent-child attachment and aggressive or serious delinquency is assessed, the relationship is generally weak or nonsignificant (Canter, 1982; Farnworth, 1984; Krohn and Massey, 1980) as it is in this study. Thus,

attachment to a parent or to parents does not seem important to aggressive delinquency. Since weak attachment appears to function as a releasing mechanism, allowing for but not necessarily causing delinquency, weak attachment may be most salient for those just beginning to engage in delinquent behaviors (Krohn & Massey, 1980). Once an individual is experienced in deviant behaviors, other factors may be necessary for continued delinquency. If one assumes that those committing serious delinquent acts (e.g., aggression) have previously engaged in minor offenses than the findings are not inconsistent with control theory.

Socialization. Results showed mixed support for the hypothesis that aggression is associated with lack of socialization. Consistent with past findings, and with the theory that decreased socialization is associated with delinquency, these delinquent girls report less socialization than normal samples of girls. However, lack of socialization was significantly associated with aggression for white delinquents but not for African-Americans. The association between white teens' aggressiveness and socialization is consistent with both control and learning theories since conformity to social norms was the aspect of socialization significantly related to aggression. As discussed in the literature review, control theory identifies belief in social norms as one element of the social bond. Results suggest that, for white teens, the likelihood of seriously delinquent

(i.e., aggressive) behavior occurring increases as belief in conventional rules decreases.

It is not clear why socialization was unrelated to African-American girls' aggression in this sample. Other factors not investigated in this study, such as a hostile, disorganized living environment (Sampson & Grove, 1989), membership in the "underclass" (Brownfield, 1986), association with delinquent peers (Fagan & Wexler, 1987; Simcha-Fagan & Schwartz, 1986), might be more salient than the elements of the social bond for the predominantly lower class African-American girls in this sample.

Ego development. The hypothesis that aggression is associated with lower levels of ego development was not supported. This seems to conflict with findings of Frank and Quinlan (1976) who found that fighting most frequently occurred at the Impulsive (I-2) stage. Differences in the dependent measure may account for the contrasting results, however. This study utilized a composite measure of aggressive behavior and a severity rating of aggression. Unlike Frank and Quinlan, who looked at a discrete behavior (i.e., fighting) the composite measure included a range of impulsive and confrontative behaviors that are consistent with both the Impulsive and the next highest level of functioning, the Self-protective level. In addition, a Self-protective girl who committed the same number of less aggressive acts as an Impulsive girl did of more aggressive acts would be rated

as equally aggressive in this study. Thus, the broadness of the measure may have obscured real differences in how aggression is expressed at the two stages. Similarly, different behaviors consistent with Impulsive and Self-protective levels could be rated as equally severe on the Severity of Assaultive Behavior Scale and thus any differences would be obscured. Also, individuals at either level might engage in identical minor or major aggressive behaviors. For example, a person at the Impulsive level might impulsively commit armed robbery because they wanted some money at that moment. A girl at the self-protective level might also commit armed robbery but do so in a more planned fashion and with a greater concern for not getting caught.

Multiple Regression Analyses

Family and personality variables. As hypothesized, a combination of family and personality factors best predicted aggression for the entire sample of girls. When SES was controlled, family conflict in association with lack of socialization predicted female aggression and accounted for 33% of the variance. Results differed for white and African-American subjects, however. For white girls, failure to internalize societal norms combined with conflictual parent-child relationships best predicted aggression and accounted for 40% of the variance. For African-American teens, a conflictual family environment and past sexual abuse predicted aggression and accounted for 42% of the variance.

Demographic differences may account for these contrasting findings. Some have argued that family life may act as a buffer to the criminogenic influence of a lower class milieu. Indeed, some research suggests that parents must be "supermotivated" in order to successfully raise their children in socially disorganized communities (Furstenburg, 1990). Furstenburg (1990) found that neighborhood characteristics and parenting style interact. In socially disorganized communities characterized by few resources, distrust of neighbors, restricted social networks, and a lack of connection between family and neighborhood, the most adaptive childrearing style is a restrictive one where parents devote enormous time and energy to monitoring, supervising and controlling their children's behavior. Ordinary parents in such neighborhoods may succeed in helping their children to avoid dangers, but it requires extraordinary parents to search out and utilize available resources that will provide opportunities for their children to succeed in school, avoid trouble with the law, and avoid excessive drug and alcohol use. Parents who are deficient in parenting skills, of course, will have greater difficulty in achieving these goals. Gottfredson, McNeill III & Gottfredson, (1991) found that females living in areas characterized by weakened family units and social disorganization reported committing more aggressive crimes than those that did not live in such areas. In the present study, African-American girls more frequently came

from the lower socioeconomic levels than the white girls. For these African-American females, a conflictual family may not only be a model for aggressive behavior, it may also fail to buffer the effects of a negative environment. For white girls coming from a less violence inducing environment, the buffering effect of families is less salient.

Family functioning is not unimportant for white teens, however. Though deficient socialization was the strongest direct predictor of white females' aggression, conflict made both direct and indirect contributions to aggression. For white girls, parent-child conflict indirectly contributed to their aggressiveness via decreased socialization. Control and learning theories suggest possible explanations for the direct and indirect relations between parent child conflict and aggressiveness for white teenagers. These girls' parents may be poor agents of direct control. That is, they tolerate and fail to consistently punish aggression towards themselves and, by implication, others. If so, if these parents fail to expect and enforce good behavior, they may also fail to teach, model and expect their children to follow conventional norms. This, in turn, leads to deficient socialization. Alternatively, parents may be modeling and expecting conformity to conventional norms, but in their open defiance of their parents these girls may be rejecting their parents and the values they stand for. Some support for this is provided by Noland (1979). Though she did not distinguish

between parent-child and other forms of conflict, in her urban, mostly white sample, not only did conflict directly affect aggression but it had even greater indirect effects via reduced identification with parents.

Severity of aggression and family and personality functioning. Severity of aggression showed no significant relations with global family and with personality variables. Multiple regression analyses revealed that lower SES was the only predictor of severity of aggression for the entire sample; lower SES and a positive mother-daughter relationship predicted the severity of African-American girls' assaultiveness; and no family or personality variables predicted the severity of white teens' assaultiveness. The relative lack of findings with this measure compared to results with the composite measure of aggression and results of other studies suggests that the Spectrum of Assaultive Behavior Scale ratings are not adequately assessing aggressiveness. One explanation for this is that this scale was developed on a sample of children and psychometric data for adolescents are lacking (Pfeffer et al, 1983).

Conclusions

While the results of this study contribute important information to the field, the small sample size and use of official delinquents limit their generalizability and validity. Furthermore, the cross-sectional nature of this project does not provide a causal explanation for aggression.

Nevertheless, results support most existing research on female delinquency and aggression and add to the knowledge base concerning official delinquents. While aggression is clearly multidetermined, this study points to the utility of including personality and family variables when attempting to understand it. They also underscore the necessity of including racial subgroups in research. In addition, this study suggests that officially delinquent females tend to engage in a variety of antisocial behaviors rather than specializing in either person- or property-oriented crimes. This is consistent with research on males showing that chronic delinquents (the mean number of arrests for girls in this sample was 10.41) perform high rates of aggressive and nonaggressive antisocial acts (Rojeck & Erickson, 1982). Future research involving samples of official delinquents should address the question of whether the overt/aggressive, covert/nonaggressive, and mixed categories are relevant to research involving seriously delinquent subjects or whether they are more useful when examining less serious delinquency.

References

- Achenbach, T. & Edelbrock, C. (1987). Manual for the Youth Self-Report and Profile. Burlington, VT: University of Vermont Department of Psychiatry.
- Agnew, R. (1985). Social control theory and delinquency: A longitudinal test. Criminology, 23, 47-61.
- Austin, R. (1978). Race, father-absence and female delinquency. Criminology, 15, 487-504.
- Bakken, L. & Romig, C. (1989). Adolescent ego development: Relationship to family cohesion and adaptability. Journal of Adolescence, 12, 83-94.
- Bell, L. & Bell, D. (1982). Family climate and the role of the female adolescent: Determinants of adolescent functioning. Family Relations, 10, 519-527.
- Blyth, D. A. (1982). Mapping the social world of adolescents: Issues, techniques, and problems. In F. Serafica (Ed.). Social Cognition, Context, and Social Behavior: A Developmental Perspective. NY: Guilford Press.
- Borduin, C. & Henggeler, S. (1982). Psychosocial development of father-absent children. In S. Henggeler (Ed.). Delinquency and Adolescent Psychopathology. Boston: John Wright-PSG., Inc.
- Borduin, C., Pruitt, J. & Henggeler, S. (1986). Family interactions in black, lower-class families with

- delinquent and non-delinquent adolescent boys. Journal of Genetic Psychology, 147, 333-342.
- Brownfield, D. (1986). Social class and violent behavior. Criminology, 24, 421-438.
- Browning, D. (1986). Psychiatric ward behavior and length of stay in adolescent and young adult inpatients: A developmental approach to prediction. Journal of Consulting and Clinical Psychology, 54, 227-230.
- Campbell, A. (1987). Self-reported delinquency and home life: Evidence from a sample of British girls. Journal of Youth and Adolescence, 16, 167-177.
- Canter, R. (1982). Family correlates of male and female delinquency. Criminology, 20, 149-167.
- Carlozzi, A., Gaa, J. & Liberman, D. (1983). Empathy and ego development. Journal of Counseling Psychology, 30, 113-116.
- Cernkovich, S. & Giordano, S. (1987). Family relationships and delinquency. Criminology, 25, 295-321.
- Cutler, S. E. & Nolen-Hoeksema, S. (1991). Accounting for sex differences in depression through female victimization: Childhood sexual abuse. Sex Roles, 24, 425-438.
- DiLalla, E., Mitchell, C., Arthur, M. & Pagliocca, P. (1988). Aggression and delinquency: Family and environmental factors. Journal of Youth and Adolescence, 17, 233-246.
- Dubow, E., Huesmann, L. & Eron, L. (1987). Childhood

- correlates of adult ego development. Child Development, 58, 859-869.
- Fagan, J., Hansen, K. & Jang, M. (1983). Profiles of chronically violent juvenile offenders. In J. Kluegel (Ed.). Evaluating Juvenile Justice. Beverly Hills: Sage Publications.
- Fagan, J. & Wexler, S. (1987). Family origins of violent delinquents. Criminology, 25, 643-669.
- Farnworth, M. (1984). Family structure, family attributes, and delinquency in a sample of low-income, minority males and females. Journal of Youth and Adolescence, 13, 349-364.
- Farrington, D. (1987). Epidemiology. In H. Quay (Ed.). Handbook of Juvenile Delinquency. NY: John Wiley & Sons.
- Figuera-McDonough, J. (1985). Are girls different? Gender discrepancies between delinquent behavior and control. Child Welfare, 64, 273-289.
- Frank, S. & Quinlan, D. (1976). Ego development and female delinquency: A cognitive-developmental approach. Journal of Abnormal Psychology, 85, 505-510.
- Geismar, L. & Wood, K. (1986). Family and Delinquency. NY: Human Sciences Press, Inc.
- Gfeller, B. (1986). Changes in ego and moral development in adolescents: A longitudinal study. Journal of Adolescence, 9, 281-302.
- Glueck, S. & Glueck, E. (1950). Unraveling Juvenile

- Delinquency. Cambridge, MA: Harvard University Press.
- Gold, S. (1980). Relations between ego level and adjustment patterns in adolescence. Journal of Personality Assessment, 44, 630-638.
- Gottfredson, D., McNeill III, R., & Gottfredson, G. Social area influences on delinquency: A multilevel analysis. Journal of Research in Crime and Delinquency, 28, 197-226.
- Gough, H. (1960). Theory and measurement of socialization. Journal of Consulting Psychology, 24, 23-30.
- Gough, H. (1965). Cross-cultural validation of a measure of asocial behavior. Psychological Reports, 13, 379-387.
- Gove, W. & Crutchfield, R. (1982). The family and juvenile delinquency. The Sociological Quarterly, 23, 301-319.
- Gully, K., Pepping, M., & Dagerink, H. (1982). Gender differences in third party reports of violence. Journal of Marriage and the Family, 47, 497-498.
- Hanson, C. & Henggeler, S. (1982). The behavior disorders and problems of female adolescents. In S. Henggeler (Ed.). Delinquency and Adolescent Psychopathology. Boston: John Wright-PSG., Inc.
- Hanson, C., Henggeler, S., Haefele, W. & Rodick, J. (1984). Demographic, individual and family relationship correlates of serious and repeated crime among adolescents and their siblings. Journal of Consulting and Clinical Psychology, 52, 528-538.
- Hauser, S. T. (1976). Loevinger's model and measure of ego

- development: A critical review. Psychological Bulletin, 83, 928-955.
- Hauser, S. T., Jacobson, A., Noam, G. & Powers, S. Ego development and self-image complexity in early adolescence. Archives of General Psychiatry, 40, 325-332.
- Hauser, S. T., Powers, I., Noam, C., Jacobson, A., Weiss, B. & Follansbee, D. (1984). Familial contexts of adolescent ego development. Child Development, 55, 195-213.
- Heilbrun, A. (1979). Psychopathy and violent crime. Journal of Consulting and Clinical Psychology, 47, 509-516.
- Henggeler, S. (1989). Delinquency in Adolescence. London: Sage Publications.
- Henggeler, S., Edwards, J. & Borduin, C. (1987). The family relations of female juvenile delinquents. Journal of Abnormal Child Psychology, 15, 199-209.
- Henggeler, S., Hanson, C., Borduin, C., Watson, S. & Brunk, M. (1985). Mother-son relations of juvenile felons. Journal of Consulting and Clinical Psychology, 53, 942-943.
- Hetherington, E.M. & Martin, B. (1986). Family factors and psychopathology in children. In H. Quay and J. Werry (Eds.). Psychopathological Disorders of Childhood. (3rd Edition). NY: John Wiley & Sons, Inc..
- Hetherington, E.M., Stouwie, R. & Ridberg, E. (1971). Patterns of family interaction and child-rearing attitudes related to three dimensions of juvenile

- delinquency. Journal of Abnormal Psychology, 78, 160-176.
- Hirschi, T. (1969). Causes of Delinquency. Los Angeles: University of California Press.
- Jenkins, R. & Glickman, S. (1946). Common syndromes in child psychiatry. American Journal of Orthopsychiatry, 16, 244-253.
- Jensen, G. (1972). Parents, peers and delinquent action: A test of the differential association perspective. American Journal of Sociology, 78, 562-575.
- Johnson, R. (1986). Family structure and delinquency: General patterns and gender differences. Criminology, 24, 65-89.
- Johnstone, J. (1978). Juvenile delinquency and the family. Youth and Society, 9, 299-313.
- Kishton, J., Starrett, R. & Lucas, J. (1984). Polar versus milestone variables in adolescent ego development. Journal of Early Adolescence, 4, 53-64.
- Knapp, R. (1963). Personality correlates of delinquency rate in a Navy sample. Journal of Applied Psychology, 47, 68-71.
- Knapp, R. (1964). Value and personality differences between offenders and nonoffenders. Journal of Applied Psychology, 48, 59-62.
- Koski, P. (1988). Family violence and nonfamily deviance: Taking stock of the literature. Marriage and Family Review, 12, 23-46.

- Kratcoski, R. (1982). Child abuse and violence against the family. Child Welfare, 7, 435-444.
- Krohn, M. & Massey, J. (1980). Social control and delinquent behavior: An examination of the elements of the social bond. The Sociological Quarterly, 21, 529-543.
- Kulik, S., Stein, K, & Sarbin, T. (1968). Dimensions and patterns of adolescent antisocial behavior. Journal of Consulting and Clinical Psychology, 32, 375-382.
- Lane, T. & Davis, G. (1987). Child maltreatment and juvenile delinquency: Does a relationship exist? In J. Burchard and S. Burchard (Eds.). Prevention of Delinquent Behavior. Beverly Hills, CA: Sage Publications.
- Laub, J. & McDermott, M. (1985). An analysis of serious crime by young black women. Criminology, 23, 81-98.
- Laub, J. & Sampson, R. (1988). Unraveling families and delinquency: A reanalysis of the Gluecks' data. Criminology, 26, 255-280.
- Laufer, W., Skoog, D. & Day, J. (1982). Personality and criminality: A review of the California Psychological Inventory. Journal of Clinical Psychology, 38, 562-572.
- Le Flore, L. (1988). Delinquent youths and family. Adolescence, 23, 629-642.
- Lewis, D., Pincus, J., Lovely, R., Spitzer, E. & Moy, E. (1987). Biopsychosocial characteristics of matched samples of delinquents and nondelinquents. Journal of the American Academy of Child and Adolescent Psychiatry, 26,

744-752.

- Lewis, D., Shanok, S., Pincus, J. & Glaser, G. (1979). Violent juvenile delinquents. Journal of the American Academy of Child and Adolescent Psychiatry, 18, 307-319.
- Linden, E. & Hackler, J. (1973). Affective ties and delinquency. Pacific Sociological Review, 16, 27-43.
- Loeber, R. (1982). The stability of antisocial and delinquent behavior: A review. Child Development, 53, 1431-1446.
- Loeber, R. & Dishion, T. (1983). Early predictors of male delinquency: A review. Psychological Bulletin, 94, 68-99.
- Loeber, R. & Dishion, T. (1984). Boys who fight at home and school: Family conditions influencing cross-setting consistency. Journal of Consulting and Clinical Psychology, 52, 759-768.
- Loeber, R. & Schmalting, K. (1985a). Empirical evidence for overt and covert patterns of antisocial conduct problems: A meta analysis. Journal of Abnormal Child Psychology, 13, 337-352.
- Loeber, R. & Schmalting, K. (1985b). The utility of differentiating between mixed and pure forms of antisocial child behavior. Journal of Abnormal Child Psychology, 13, 315-336.
- Loeber, R. & Stouthamer-Loeber, M. (1986). Family factors as correlates and predictors of juvenile conduct problems and delinquency. In M. Tonry and N. Morris (Eds.). Crime

- and Justice (Vol. 7). Chicago: University of Chicago Press.
- Loeber, R., Weismann, W. & Reid, J. (1983). Family interactions of assaultive adolescents, stealers and nondelinquents. Journal of Abnormal Child Psychology, 11, 1-14.
- Loevinger, J. (1976). Ego Development. San Francisco: Jossey-Bass.
- Loevinger, J. (1979). Construct validity of the sentence completion test of ego development. Applied Psychological Measurement, 3, 281-311.
- Loevinger, J. & Wessler, R. (1970). Measuring Ego Development (Vol. 1). San Francisco: Jossey-Bass.
- Loevinger, J., Wessler, R. & Redmore, C. (1970). Measuring Ego Development (Vol. 2). San Francisco: Jossey-Bass.
- King, C. (1975). The ego and the integration of violence in homicidal youth. American Journal of Orthopsychiatry, 45, 134-146.
- McCord, J. (1979). Some child-rearing antecedents of criminal behavior in adult men. Journal of Personality and Social Psychology, 37, 1477-1486.
- McCord, W., McCord, J. & Howard, A. (1961). Familial correlates of aggression in nondelinquent male children. Journal of Abnormal and Social Psychology, 62, 79-93.
- Megargee, E. (1972). The California Psychological Inventory Handbook, WA: Jossey-Bass, Inc., Publishers.

- Megargee, E., Bohn, M. Jr., Meyer, J. Jr., & Sink, F. (1979). Classifying Criminal Offenders. CA: Sage Publications.
- Moos, R., & Moos, B. S. (1981). Family Environment Scale Manual. Palo Alto, CA: Consulting Psychologists Press.
- Morris, R. (1964). Female delinquency and relational problems. Social Forces, 43, 82-89.
- Noam, G., Hauser, S., Santostefano, S., Garrison, W., Jacobson, A., Powers, S. & Mead, M. (1984). Ego development and psychopathology: A study of hospitalized adolescents. Child Development, 55, 184-194.
- Norland, J. Shover, M., Thornton, & James, J. (1979). Intra family conflict and delinquency. Pacific Sociological Review, 22, 223-240.
- Nye, F. I. (1958). Family Relationships and Delinquent Behavior. NY: Wiley.
- Olweus, D. (1980). Familial and temperamental determinants of aggressive behavior in adolescent boys: A causal analysis. Developmental Psychology, 16, 644-660.
- Patterson, G. R. (1982). Coercive Family Process. Eugene, OR: Castalia.
- Patterson, G. R. & Dishion, T. (1985). Contributions of families and peers to delinquency. Criminology, 23, 63-79.
- Patterson, G. R. & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. Child Development, 55, 1299-1307.

- Peterson, D., Quay, H. & Anderson, A. (1959). Extending the construct validity of a socialized scale. Journal of Consulting Psychology, 23, 182.
- Pfeffer, C.R., Plutchik, R., & Mizruchi, M.S. (1983). Predictors of assaultiveness in latency age children. American Journal of Psychiatry, 140, 31-35.
- Powers, S., Hauser, S., Schwartz, J., Noam, G. & Jacobson, A. (1983). Adolescent ego development and family interaction: A structural developmental perspective. In H. Grotevant & C. Cooper (Eds.). Adolescent Development in the Family. WA: Jossey-Bass Inc., Publishers.
- Powitzky, R. J. (1976). Ego levels and types of federal offenses. Dissertation Abstracts International, 36, 11-B, 5763.
- Quay, H. (1987). Patterns of delinquent behavior. In H. Quay (Ed). Handbook of Juvenile Delinquency. NY: John Wiley & Sons.
- Rankin, J. (1983). The family context of delinquency. Social Problems, 30, 466-479.
- Reid, J. & Hendricks, A. (1973). A preliminary analysis of the effectiveness of direct home intervention for treatment of pre-delinquent boys who steal. In L. Hamerlynck, L. Handy & E. Mash (Eds). Behavior Therapy: Methodology, Concepts and Practice. Champaign, IL: Research Press.

- Riege, M. (1972). Parental affection and juvenile delinquency in girls. British Journal of Criminology, 12, 55-73.
- Rodick, J. D. & Henggeler, S. (1982). Parent-adolescent interaction and adolescent emancipation. In S. Henggeler (Ed.). Delinquency and Adolescent Psychopathology. Boston: John Wright-PSG., Inc.
- Rodick, J. D., Henggeler, S. & Hanson, C. (1986). An evaluation of the family adaptability and cohesion evaluation scales and the circumplex model. Journal of Abnormal Child Psychology, 14, 77-87.
- Rosen, A. (1977). On the dimensionality of the California Psychological Inventory Socialization Scale. Journal of Consulting and Clinical Psychology, 45, 583-591.
- Rosen, A. & Schalling, D. (1974). On the validity of the California Psychological Inventory Socialization Scale: A multivariate approach. Journal of Consulting and Clinical Psychology, 42, 757-765.
- Rosen, L. (1985). Family and delinquency: Structure or function? Criminology, 23, 553-573.
- Rutter, M. & Giller, H. (1983). Juvenile Delinquency. NY: The Guilford Press.
- Sampson, R. & Grove, W.B. (1989). Community structure and crime: Testing social disorganization theory. American Journal of Sociolology, 94, 774-802.
- Sarbin, T., Wenk, E. & Sherwood, D. (1969). An effort to

- identify assault-prone offenders. Journal of Research in Crime and Delinquency, 5, 66-71.
- Sears, R. R., Maccoby, E. E., & Levin, H. (1957). Patterns of Child Rearing. Evanston, IL: Row Peterson.
- Siegman, A. (1962). Personality variables associated with admitted criminal behavior. Journal of Consulting Psychology, 26, 199.
- Shanok, S. & Lewis, D. (1981). Medical histories of female delinquents. Archives of General Psychiatry, 38, 211-213.
- Shover, N., Norland, S., James, J. & Thornton, W. (1979). Gender roles and delinquency. Social Forces, 58, 162-175.
- Simcha-Fagan, O. & Schwartz, J. (1986). Neighborhood and delinquency: An assessment of contextual effects. Criminology, 24, 667-703.
- Simons, R., Miller, M. & Aigner, S. (1980). Contemporary theories of deviance and female delinquency: An empirical test. Journal of Research in Crime and Delinquency, 17, 42-56.
- Snyder, J. & Patterson, G. R. (1987). Family interaction and delinquent behavior. In H. Quay (Ed.). Handbook of Juvenile Delinquency. NY: John Wiley & Sons.
- Stein, K., Gough, H. & Sarbin, T. (1966). The dimensionality of the CPI Socialization Scale and an empirically derived typology among delinquent and nondelinquent boys. Multivariate Behavioral Research, 8, 197-208.
- Steinberg, L. (1987). Familial factors in delinquency: A

- developmental perspective. Journal of Adolescent Research, 2, 255-268.
- Stewart, C. & Zaenglein-Senger, M. (1984). Female delinquency, family problems and parental interactions. Social Casework: Journal of Contemporary Social Work, 65, 428-432.
- Thorne, G. (1963). Discrimination within the delinquent continuum on Gough's Socialization Scale, Journal of Consulting Psychology, 27, 183.
- Tolan, P. (1988a). Delinquent behaviors and male adolescent development: A preliminary study. Journal of Youth and Adolescence, 17, 413-427.
- Tolan, P. (1988b). Socioeconomic, family and social stress correlates of adolescent antisocial and delinquent behavior. Journal of Abnormal Child Psychology, 16, 317-331.
- Van Voorhis, P., Cullen, F., Mathers, R. & Garner, C. (1988). The impact of family structure and quality on delinquency: A comparative assessment of structural and functional factors. Criminology, 26, 235-261.
- Vincent, K. & Castillo, J. (1984). Ego development and DSM-III Axis II personality disorders. Journal of Clinical Psychology, 40, 400-402.
- Vincent, L. & Vincent, K. (1979). Ego development and psychopathology. Psychological Reports, 44, 408-410.
- Walsh, A., Beyer, J. A. & Petee, T. (1984). Violent

delinquents: An examination of psychopathic typologies. Journal of Genetic Psychology, 148, 385-392.

Ward-Hull, C. (1981). Correlates of female juvenile delinquency. Dissertation Abstracts International, 41, 11B.

Waugh, M. & McCaulley, M. (1981). Relation of level of ego development to type and severity of psychopathology. Journal of Consulting and Clinical Psychology, 49, 295-296.

Wells, L. & Rankin, J. (1988). Direct parental controls and delinquency. Criminology, 26, 263-285.

Widom, C.S. (1989a). Child abuse, neglect, and violent criminal behavior. Criminology, 27, 251-271.

Widom, C.S. (1989b). Does violence beget violence? A critical examination of the literature. Psychological Bulletin, 106, 3-28.

Wilson, H. (1980). Parental supervision: A neglected aspect of delinquency. British Journal of Criminology, 20, 203-235.

Wilson, J. & Herrnstein, R. (1985). Crime and Human Nature. NY: Simon and Schuster.

APPROVAL SHEET

The dissertation submitted by Cindy J. Nowinski has been read and approved by the following committee:

Dr. Maryse S. Richards, Director
Professor, Psychology, Loyola

Dr. Dan P. McAdams
Professor, Psychology and Human Development,
Northwestern University

Dr. Ronald R. Rosenthal
Director of Research, Illinois State Psychiatric
Institute

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

10-30-91
Date

Maryse Richards, Ph.D.
Director's Signature