CORRELATES OF SELF-ESTEEM AMONG ADOLESCENT BOYS: IMPLICATIONS FOR A DEFENSE MODEL OF DELINQUENCY

by

Serena Patterson

B.A., Yankton College, 1981

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Department

of

Psychology

© Serena Patterson 1985

SIMON FRASER UNIVERSITY

August, 1985

All rights reserved. This work may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.

APPROVAL

Name: Serena Joan Patterson

Degree: Master of Arts

Title of Thesis: Correlates of Self-Esteem Among Adolescent Boys: Implications For A Defense Model of Delinquency.

Examining Committee:

Chairman: Dr. Janet Strayer, Ph.D.

Dr. Robert G. Ley, Ph.D.
Senior Supervisor

Dr. James E. Marcia, Ph.D.

Dr. Raymond Koopman, Ph.D.

Dr. Tony Ue Page, Ph.D.
External Examiner
Department of Psychology
B.C. Children's Hospital
Vancouver, B.C.

Date Approved Aug. 30, 1985

PARTIAL COPYRIGHT LICENSE

I hereby grant to Simon Fraser University the right to lend my thesis or dissertation (the title of which is shown below) to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users. I further agree that permission for multiple copying of this thesis for scholarly purposes may be granted by me or the Dean of Graduate Studies. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Title of Thesis/Dissertation:

Correlates of Self-Esteem Among Adolescent Boys:

Implications For A Defense Model of Delinquency.

Author:

(signature)

Serena Joan Patterson

(name)

Feb. 27, 1985

(date)

ABSTRACT

Sixty-four tenth grade boys were administered measures of family closeness, family satisfaction, school satisfaction, grade point average, delinquent behavior and self-esteem. The hypothesis that delinquency works to defend self-esteem against the threats of negative experiences in the family or school was tested, using a multiple regression model, with delinquency serving as both an independent and a moderator variable. As a moderator variable, delinquency failed to alter the relationship between school and family measures, and self-esteem. As an independent variable, delinquency was useful, only in conjunction with school and family measures, for predicting self-esteem scores. This was true for a measure of total delinquent behavior, as well as delinquency subscales reflecting identification with the delinquent role, drug use, and assaultiveness; but not for a measure of parental defiance. The role of delinquency in the prediction equation appears to be that of a suppressor variable, working in conjunction with the school and family measures. Implications for ego development, as well as delinquency, are discussed.

DEDICATION

to Alice.

ACKNOWLEDGEMENTS

The author gratefully acknowledges the help and encouragement of her supervisory committee; Dr. Robert G. Ley, Dr. Ray Koopman, Dr. James Marcia, and Dr. Tony LePage. In addition, I would like to thank the students and staff of Moscrop Junior Secondary School, and the Burnaby and New Westminster probation offices. Finally, thanks to Maura Smylie for her helpful advice, and to Ian Robbins for his endless support and technical help in producing a finished document.

TABLE OF CONTENTS

LIST OF TABLES

PART A

INTRODUCTION

The notion that self-esteem is related to delinquent behavior has received considerable attention from psychologists over the last two decades. Perhaps this is not surprising, given the intuitive appeal of a seemingly simple answer to age-old questions. Why do people engage in behavior which, in the end, leads them to no good? Why, in spite of all of the efforts to teach children that "crime does not pay", in spite of all the law-abiding role-models provided through the media, and in spite of the hero-worship accorded to characters representing the good and the true, from Superman to Mr. T., would anyone choose to model themselves after the bad guys? "They must not think much of themselves", we say, and the matter appears solved.

Yet, this deceptively simple explanation rests upon two constructs which are neither well-understood nor uniformly defined. One problem in exploring the relationship between self-esteem and juvenile delinquency has been a lack of agreement on who should be studied (i.e., who should be considered "delinquent adolescents"). A second problem is that of defining self-esteem. Even if the concept itself is agreed upon, there is still considerable disagreement over how self-esteem should be measured.

A third problem in exploring the relationship between self-esteem and delinquency is the difficulty in assigning causal significance. If self-esteem and juvenile delinquency are indeed correlated, what conclusions can we draw? Does low self-esteem cause juvenile delinquency? Does delinquency cause

low self-esteem? Or does a third factor (or set of factors) work to cause both low self-esteem and juvenile delinquency, independent of one another?

CHAPTER I

SELF-ESTEEM AND DELINQUENCY: AN HISTORICAL REVIEW

Wells (1978) reviews and identifies three viewpoints which emerged during the 1950s regarding the relationship between self-esteem and social deviance. The first of these viewpoints, structural interactionism, focussed on delinquency as a response to social variables, and was thus an attempt to bring earlier social structural theories to the level of individual motivation. Delinquency was seen to arise from "the intersection of social dysfunction and the fundamental motivation of people to enhance or validate their self-identities through social interaction" (Wells, 1978, p. 190). Cohen (1955) was the main architect of structural interactionism. In his study of delinquent gang members, Cohen focused on delinquency as a subcultural response to limiting social conditions such as poverty and high unemployment. Later renditions of this viewpoint (Chapman, 1966; Hall, 1966) stressed the role of the delinquent subculture in protecting self-esteem, through its valuation of delinquent roles and devaluation of conventional roles (Chapman, 1966; Hall, 1966). In areas where success was not easily attainable by conventional means, the values of the delinquent subculture legitimized alternative (including illegal) means of achieving status and material gains.

The socialization-control hypothesis, as articulated by Reckless (Reckless, Dinitz and Murray, 1956; Shwartz and Tangri,

1965; Reckless, 1967), considered a positive self-concept an insulator against delinquency in the face of unfavorable social conditions. Originating as a theory of nondelinquency, this perspective construed self-esteem as a personality variable, and only in later formulations did the process of its development receive much emphasis (Voss, 1969).

The works of Becker (1963) and Kitsuse (1962) exemplify the third perspective, which Wells identified as labelling theory. Labelling theorists stressed the role of social-control agencies in recognizing and defining individuals in terms of deviant social labels. They felt that this labelling process led individuals to adopt a deviant self-concept and to stabilize deviant behavior patterns. Thus, the intervening influence of social-control agencies would lead delinquents to adopt low self-esteem, along with "delinquent" self-concepts.

By the 1970s, it had become clear that labelling theory, as it stood, could not accommodate several aspects of delinquency which were evident in the data. First, as Chapman (1966), Hall (1966) and others pointed out, identification with a delinquent role or label did not necessarily have negative implications for the self-image. Second, Jensen (1972) showed that the experience of having an official record of delinquency had varied effects on delinquents' self-concept. The effects of such a record on self-concept varied by race, and by social class. In general, white and middle-class adolescents appeared more likely than black and lower-class adolescents with similar court records to

see themselves as "delinquent". These findings made it clear that, if labelling theory was to survive, it would have to somehow change to account for the variation in reactions to a delinquent label, and for the ways in which the social milieu could influence these reactions.

A significant step toward clarifying labelling effects was made by Chassin, Presson, Young and Light (1980). In a study involving juvenile delinquents, adolescent psychiatric inpatients, and high school students, Chassin, et. al. delineated three possible responses to receiving a socially deviant label. Delinquent and inpatient adolescents seemed to respond to their labels in one of the following three ways: (a) accepting the generally held stereotype of the label, and describing themselves accordingly; (b) accepting the label, but changing its content, so that they perceived the role it implies in more positive terms than those of the stereotype, or (c) not applying the label to themselves. Behaviorally, those delinquents who identified with the stereotype definitions of their label were seen by staff as showing more intrapersonal pathology, while those who resisted the label were seen as being unsocialized or subcultural delinquents.

A second development, beginning in the 1970s, is described by Wells as the blurring of the distinction between the structural interactionist and the socialization-control perspectives. Voss (1969) began the fusion of the two approaches. He claimed that the two viewpoints were not

necessarily contradictory, but simply emphasized different chronological points within the same process. Self esteem was both a product of social interaction, and a possible influence in the development of delinquent or non-delinquent behavior.

The third development resulted from the rise in the use of self-report data, which made it clear that delinquent behavior was much less tied to social class and/or certain locations in cities than had been previously thought (Hindelang, 1980). Indeed, delinquent behavior was prevalent in every social strata, to a degree that made it impossible to excuse the middle-class delinquent as an anomaly. Theories which were equipped to explain delinquency only as it was found in the urban ghetto were suddenly felt to be too narrow in focus. New theories of delinquency would have to lengthen their list of contributing factors to include those experienced by middle- and upper-class children, as well as the urban poor.

The hypothesized association between adolescent self-esteem and delinquent behavior raises two empirical questions: first, do delinquents have lower self-esteem than do non-delinquents? second, if so, why might this be so?

Studies seeking to answer the first question have yielded mixed results. Several have found a slight association between low self-esteem, or negative self concepts, and delinquency (e.g., Scarpittti, 1965; Jensen, 1972; Marohn, Offer and Ostrov, 1971; Cole and Kumchi, 1981; Offer, Ostrov and Howard, 1981).

Similarly, Svobodny (1982) found more negative self concepts among chemically dependent adolescents than among normal adolescents, and Reckless, Dinitz and Murray (1956) and Schwartz and Tangri (1965) found more negative self concepts among boys that teachers nominated as "bad" boys, than among those nominated by teachers as "good" boys.

However, several studies have not found association between low self-esteem and delinquent behavior. For example, Cole, Detting and Hinkle (1967) failed to find lower self-esteem among female adolescents who were referred for treatment for displaying overt hostility towards authority and committing status offenses. Cole, et al.'s study is particularly interesting because it involved female subjects, while most studies of delinquency involve only male subjects. More recently, Hughs and Dodder (1980) failed to find a relationship between any of several dimensions of self (including self-concept and self-acceptance) and delinquency in a sample of 264 male students from urban high schools.

Other authors, finding only limited support for an association between self-esteem and juvenile delinquency, have sought to qualify the relationship, calling for more precise definitions and the consideration of more factors. For example, Offer, Ostrov and Howard (1981) showed that delinquent adolescents tend to have more negative self-concepts regarding most aspects of their lives, including family and peer relations, than do their nondelinquent peers. At the same time,

delinquent youth evaluate certain aspects of themselves, such as sexuality and body image, quite favorably. Jensen (1972) suggested that although a poor self-concept was implicated in his study as being associated with delinquent behavior, the relationship was not strong enough to preclude other factors from being more important. Deitz (1969), using ratings of real and ideal self-images, found that delinquent youth did not differ from normal controls in terms of how positively they described their real selves ("me as I really am"). However, he found that the delinquent subjects did show a larger discrepancy between the real self and the ideal self ("me as I would like to be") than did their nondelinquent counterparts. Deitz suggests that delinquent adolescents were less satisfied with themselves than were nondelinquent adolescents.

In summary, most studies show a slight correlation between self-esteem and delinquency, but the effect is not robust. Sample characteristics, such as age, sex and type of offenders seem to affect the outcomes of such studies, as do variations in methodology.

CHAPTER II

DELINQUENCY AND SELF-ESTEEM: DEFINITIONAL ISSUES

Variations in outcome linked to methodology highlight the need to deal with definitional issues in delinquency research. The terms "delinquency" and "self-esteem" have been used in conjunction with a variety of operational definitions, some of which are more problematic than others. The practice of comparing court-defined "juvenile offenders" to a control group of adolescents who lack a court record may result in a serious biasing of results. The demographic biases apparent in legal versus self-report data on rates of delinquent behavior are well documented (Hindelang, 1980). Factors such as socioeconomic status (Scarpitti & Stephenson, 1969) and the presence of a father in the home (Fenwick, 1982) are important in determining which children go through the courts, as well as what happens to them when they do. Given these biases, it is risky to assume that psychological differences between naturally occurring groups are related to delinquency, and not to demographic factors.

An alternative to the use of naturally occurring groups in delinquency research is to consider delinquency as a continuum of behavior rather than a catagory with clearly defined boundaries. The inclination towards delinquent behavior can be inferred from the frequency and seriousness of delinquent behavior in which subjects claim to have engaged (for instance,

as indicated on a self-report questionnaire). Rating, rather than classifying adolescents on the basis of self-reported delinquent behavior may be especially useful for exploring the correlates of delinquent behavior, if not for distinguishing "delinquent" from "nondelinquent" children. The continuum approach rests on the assumption that delinquency can be usefully conceived in quantitative, as opposed to qualitative, terms. The main drawback of the approach is the difficulty in assigning a value to a specific behavior in order to construct an interval scale; for instance, how many minor offences equal one major offence?

A second term in need of clarification is "self-esteem". Morris Rosenberg (1965, 1973) defines self-esteem as an overall positive or negative evaluation of the self; or a global evaluation of one's self as a worthwhile person. Self-esteem is the evaluative component of the self-concept. This definition avoids the complexity implied by Offer and his colleagues (Offer, Ostrov and Howard, 1981). In their study of adolescents' self-concept and self-esteem, Offer, et. al. contended that adolescents evaluate different aspects of their lives somewhat independently of one another. The Offer Self-image Questionnaire, developed for Offer's study, measures adolescents' self-evaluations in several different realms of functioning, such as school performance, family relationships, and occupational skills. Yet, despite its relative simplicity, Rosenberg's measure of global self-esteem has been associated

with several theoretically important variables, including age (McCarthy and Hoge, 1982), parental interest (Rosenberg, 1963) and anxiety (Rosenberg, 1962). It is highly correlated with several other commonly-used measures of self-esteem, and shows high test-retest reliability (Silber and Tippett, 1965).

Kaplan (1975, 1978, 1980) deploys the term "self-attitude" in a manner similar to Rosenberg's use of "self-esteem". Kaplan defines self-attitude as "a person's characteristic global affective response to self-perception and self-evaluation" (Kaplan, 1980, p.3). By adding the emphasis on affect, Kaplan paves the way for conceptualizing self-esteem as having motivational, drive-like properties.

CHAPTER III

SELF-ESTEEM AND ADOLESCENCE: DEVELOPMENTAL ISSUES

The process of self-evaluation was described by Mead (1934) as requiring the individual to respond to himself/herself from the standpoint of another. The "self", in this sense, is experienced only indirectly, through the reactions of the social group or of individuals. Through communication with others, the individual learns to see the self as an object, and to take the attitudes (or imagined attitudes) of others toward that self. Thus, one's self-evaluation is influenced by the evaluations of those around him/her; particularly those who define the membership groups to which he/she belongs (e.g., the family, community, or ethnic group).

A second process also seems to affect the development of self-esteem, somewhat independently of social approval. That is, persons may evaluate themselves on the basis of self-efficacy; their perceived ability to deal effectively with the world, to create new things, and, in short, to "have an effect" on their surroundings (Gecas, 1982; Gecas and Schwalbe, 1983). In principle, efficacy-based self-esteem is different from self-esteem which is based on the opinions of others. White (1963) separates the two kinds of self-esteem into that stemming from inner sources (i.e., one's experienced degree of competence and power), and that stemming from outer sources (i.e., one's perceived evaluation by others). Both sources of influence are

important, but self-esteem based on the former represents a more stable attribute, being less vulnerable to changes in one's situation or the whims of one's companions. Still, the two forms of self-esteem are likely to overlap. That is, when people praise us for our accomplishments, we are likely to feel both approved of and competent. Overall, an efficacy-based view of self-esteem presents a more active, self-determining process of self-evaluation; it gives more importance to the creative aspects of self-concept development than does the social-interactionist view expressed by Kaplan.

Gecas and Schwalbe argue that social structures strongly influence the degree to which efficacy affects the development and maintenance of self-esteem. Within a social structure, such as a school or workplace, wherein there is little opportunity to express autonomy or to obtain the material requisites of power, control or prestige, the person will have little opportunity to experience a sense of self-worth based on efficacy. This is particularly relevant when considering the situation of adolescents, who, due to the limited social roles available to their age group, may feel that they have few options, little opportunity for self-expression, and limited access to the material benefits of society. One consequence of these constraints may be a greater reliance upon the opinions of others for self-esteem than is found among other age groups.

Within a limited situation for self-expression, such as a high school classroom or a low-status job, some persons may

still developed a sense of efficacy through competent task performance, provided that they believe in the value of what they are doing. On the other hand, persons may develop efficacy by learning to manipulate the situation to their advantage, or by devaluing the entire context as a realm of self-expression. In the latter case, the person would simply emphasize the importance of another realm of expression. For instance, a poor student may place little importance on school performance as a basis for self-esteem, while greatly valuing a part-time job, a heterosexual relationship, or competence within a street culture as a source of self-esteem enhancement.

A third force in the development of self-esteem also lies within the person. Both Rosenberg (1973) and Kaplan (1980) refer to a universal desire to conceive of the self in positive terms. Kaplan refers to this need as the "self-esteem motive", because of its ability to color perceptions and guide attention. Thus, persons tend to discount sources of negative evaluations of the self, while assigning greater importance to sources of positive evaluations of the self. Furthermore, persons magnify the effects of positive evaluation on self-esteem. The effects of others' judgments on self-esteem often can be moderated by the individual's evaluation of the source of those judgments (Rosenberg, 1973). In this process, the important variables are valuation, or how much the source of the opinion is valued; and credibility, or whether an opinion from this source is respected. These two dimensions are considered somewhat

independent. For instance, one may highly value the approval of a person in a position of power, while feeling that the person is fickle and unreliable in his or her judgements. Rosenberg found that among school children in grades three to twelve, the association between perceived evaluations by various putative significant others (i.e., teachers, parents, siblings, classmates, boys and girls) and self-esteem was stronger when the child highly valued the significant other, and when the child felt that the opinions of the significant other were credible.

Also apparent in Rosenberg's data was the effect of volition, motivated by self-esteem, on the assignment of credibility and importance to the judgements of others. Children tended to value the opinions of persons who they believed evaluated them positively far more than they valued the opinions of persons who they believed evaluated them negatively. Also, the children felt that the persons who evaluated them favorably were smarter and knew them better, indicating the assignment of a higher degree of credibility to these sources.

One interesting implication of Rosenberg's study for the development of self-esteem is that children can, to some extent, choose whether, and to what degree, persons become significant, on the basis of how persons make them feel about themselves. However, this tendency is somewhat constrained by the reality of social roles. For instance, the mother-child relationship is evidently so powerful that it is not easily overcome by

selective valuation. Sixty-four percent of children who believed that their mothers thought they were "not so nice" still stated that they "cared very much" what their mothers thought of them. At the same time, negative evaluations from fathers, teachers, and peers (in that order) appear to be more easily discounted.

Age of the child also appears to affect the assignment of value and credence to the judgements of others, with older children less likely to care what teachers think of them. Rosenberg found a gradual decline in concern over the judgements of adults in general among white, but not black children (Rosenberg, 1973, p. 854).

During adolescence, it appears that developmental and social factors combine to make the process of self-evaluation more crucial, salient, and dramatic in its effect on behavior than it was during childhood. The cognitive-developmental perspective, based on the work of Piaget, maintains that during adolescence children acquire, through the development of formal operational logic, the cognitive ability to take the role of the other in seeing themselves. According to Elkind (1980), adolescents are able to imagine not only what others may be thinking, but what others might think about what they are doing or thinking. This increase in role-taking ability leads to heightened self-conciousness. Elkind believes that young adolescents construct an "imaginary audience", which constantly monitors their actions and appearance. Thus, self-evaluation takes on a quality of urgency in early adolescence; the adolescent will go

to great lengths to maintain the belief that he/she is special and worthwhile.

Some empirical evidence supports the theoretical notion that early adolescence is a time of change and reorganization of the self-concept, as well as heightened self-conciousness. The role of increased cognitive sophistication and role-taking ability in the development of self-evaluative skills is evidenced in a study by Herzberger, Dix, Erlebacher and Ginsburg (1981). Herzberger, et al. found an increasing tendency among adolescents to perceive others' impressions of themselves in terms of stable, psychological traits rather than surface qualities or actions. Adolescents were also increasingly likely to qualify these impressions in terms of social roles. For instance, they could contrast the evaluations which they might receive from their parents with those from their peers, and tell why each might have a particular impression of them.

Ellis and Davis (1982),in a review article,cite evidence for a reorganization of self-concept during the transitional period leading into adolescence. According to Ellis and Davis, social maturity is differentiated into a family affiliation dimension and a self-assertion dimension at around age thirteen. At age 16, self-acceptance seems to coincide with an index of independent functioning. This latter finding is interesting in light of data from the Rosenberg study cited above (1972), which found an increasing tendency with age for children to name themselves as the people who knew them best "deep down inside",

and a decreasing tendency to name their mothers or fathers. Although the tendency to name friends increased at early adolescence, in all groups, best friends were named rarely compared to selves and mothers. Taken together, these studies suggest that the interest in the peer group noted in early adolescence represents, for most, part of the process of establishing an autonomous self-concept, rather than a true shift in allegiance away from parents. For the normal adolescent, the peer group does not replace the parents as an important source of evaluative information; rather, between the ages of approximately thirteen and sixteen, the successful adolescent becomes more adept at evaluating his/her self through internalized standards.

The affective consequences of the changes in self-concept which occur at this time are not clear. Simmons, Rosenberg and Rosenberg (1973), in a study involving 1,917 school children in grades three through twelve, found some evidence for negative emotional consequences during early adolescence. Simmons, et. al. found a greater degree of instability of the self-image, heightened self-consciousness, slightly lower global self-esteem, lower opinions of themselves with regard to valued qualities, less conviction that parents, teachers and same-sex peers had a high opinion of them, and a greater tendency to show depressive affect among twelve year olds than among any other age group. They also noted that these changes seemed to be brought about more by environmental factors than by age or body

maturation; those twelve-year-old subjects who entered junior high school were more likely to show the above disturbances than were those who remained in elementary school. Protinsky and Farrier (1980) also found self-esteem to be lowest among early adolescents, but they found a steady increase in stability of self-esteem, and a steady decrease in depressed affect, from preadolescence (ages nine to eleven) to late adolescence (ages seventeen to eighteen). Among their sample, self-conciousness peaked at middle adolescence (ages fifteen to sixteen). Unfortunately, Protinsky and Farrier's sample was restricted to rural, Caucasian students, and they provide no information on the school arrangements of the students. It is likely that differences in the specific environments of the subjects would account for some of the descrepancies between their findings and those of the Simmons study. Several other studies have shown increasing self-esteem with age over the adolescent period (e.g. McCarthy and Hoge, 1982; O'Malley and Bachman, 1983; Kaplan, 1980).

In summary, it appears that there is considerable support for the notion that a reorganization of the self-concept occurs during early adolescence. The product of this change appears to be a heightened sense of individuality and desire for autonomy, with psychological traits becoming more salient as a part of one's identity or self-image. Self-consciousness, lowered self-esteem, and/or depressed affect may also be more prevalent at this time. The evidence implies that self-evaluation during

adolescence is qualitatively different than it is at other times in the life cycle. The affective consequences of self-evaluation at this time are particularly acute. At the same time, the young adolescent in our culture enters a new social position, with greater emphasis on competence and independence, limited opportunities to demonstrate these qualities, and greater exposure to a variety of potential peer groups and lifestyles. Offer, Ostrov and Howard (1981) show that the majority of adolescents appear to adjust well to such changes, and see themselves in confident, positive terms. However, Offer, et al. also indicate that a minority of adolescents are not able to establish and/or maintain a positive self-concept at this time, particularly within the social frameworks of the school and family. These may be the very adolescents who are "at risk" for developing delinquent behavior and lifestyles. Independence and autonomy seem to come hand-in-hand with heightened self-conciousness during early adolescence, which is consistent with Erik Erikson's (1959) emphasis on identity formation as the central task facing adolescents.

CHAPTER IV

DELINQUENCY AS A PSYCHOLOGICAL DEFENSE

The family and school are two social situations which dominate much of the adolescent's time and influence self-concept. Each of these situations presents a special challenge to the self-esteem of some adolescents.

Within the family, the adolescent's movement towards a more autonomous self-concept, described above, may meet with a variety of responses, from openness and support to hostility and misunderstanding. Fortunately, Offer, Ostrov and Howard (1981) indicate that, for the majority of adolescents, family relationships are a source of positive interaction. Most adolescents within Offer, et al.'s study indicated that they felt their parents were proud of and satisfied with them. However, these feelings were not unanimously expressed. In fact, Offer's study also shows that perceptions of parental relationships are one area in which delinquent adolescents tend to differ strikingly from their nondelinquent peers. For instance, delinquent adolescents stated more often that their parents were ashamed of them, that their mothers or fathers were no good, and that they, themselves, felt like a bother at home. Delinquent adolescents stated less often that they believed they would be a source of pride to their parents, and only one-half (as compared to three quarters of normal adolescents) felt that they would someday raise a family similar to their own (Offer,

et al., 1981, p. 68). Matteson (1974) shows that adolescents with low self-esteem viewed communication with their parents as less effective than did adolescents with high self-esteem. Similarly, Gecas (1971) found that adolescents' self-evaluations of both power and worth were significantly related to the degree to which their parents were seen as supportive. Bachman (1970) found that his measure of family closeness, which focuses extensively on the quality of parent-child relationships, correlated with self-esteem to a moderate degree. Rosenberg (1963) also found that parental interest is positively associated with self-esteem among children, while deCindio, Floyd, Wilcox, and McSeveney (1983) found that among high school seniors, high self-esteem is associated with a strong parent (versus peer) orientation. Gold (1972) found a positive correlation between family closeness and self-esteem among all except the most delinquent subjects in a group of tenth grade boys. Although it is not possible to infer a causal sequence from this data, it does appear that adolescents who do not perceive their families to be supportive tend to show low self-esteem, greater reliance on peers (as opposed to parents) for self-concept definition and affirmation, and a high degree of juvenile delinquency.

Just as the family can be considered a training ground for entry into adult relationships, the school can be viewed as the training ground for entry into adult occupational roles. Self-esteem based on efficacy may be built upon mastery of

schoolwork and/or competence in extracurricular activities. As Offer, et. al. (1981) point out, most adolescents claim a strong sense of competence, and express confidence in their ability to comply with the external demands of their environment. However, competence is also an area where delinquent adolescents appear to differ considerably from their nondelinquent peers. Offer, et al. (1981) found that delinquent adolescents were well below normal adolescents in feelings of mastery. For example, delinquents, more often than normal adolescents, stated that they perform poorly academically, are confused, are ashamed of their behavior, and find life "an endless series of problems with no solutions in sight" (p.77). Like poor parental relationships, low self-reported school grades have been found to be associated with low self-esteem and high levels of delinquent behavior (Bachman, 1971; Gold and Mann, 1972). Again, a causal sequence from low school grades to low self-esteem cannot be inferred from correlational data. However, in light of Gecas and Schwalbe's discussion of efficacy and self-esteem, it is interesting to speculate about the probable consequences of repeated failure to establish a sense of efficacy within the school setting. First, with limited opportunities to develop efficacy-based self-esteem, the adolescent may come to rely more on the judgements of others for his/her sense of self-worth. If the approval of the adults in the adolescent's life is contingent upon school grades, then peers may become the main source of positive evaluations available for building a sense of self-worth. Thus, self-esteem is likely to be lower and less

stable for academically inferior adolescents, than for those who are able to do well in schoolwork. Second, school is likely to be devalued as an arena for achievement and self-expression. It may be overshadowed by the family, the peer group, and/or street life, depending on the youngster's ability to achieve a sense of mastery in one of these areas. If the family is seen by the youth as unsupportive, then the adolescent may become quite dependent on the peer group as a source of support, and street life as a domain for achievement.

Gold and Mann (1972) suggest threats to the adolescent's self-esteem may lead to delinquent behavior. Gold and Mann propose that those adolescents who are unable to earn approval in important areas of their lives (e.g. school performance and family relationships) are in danger of losing self-esteem. For these adolescents, delinquent behavior may act as a defence against the negative effects of repeated failure on self-esteem. This theory assumes that delinquent behavior patterns are part of a social role which, for adolescents (particularly male adolescents), involves adopting delinquent peers and values. By adopting the role of the juvenile delinquent, the male adolescent accomplishes several things: (a) He rejects that set of values which place a positive emphasis on activities at which he has previously failed and/or feels doomed to fail; (b) He adopts a set of values which place a positive emphasis on activities in which he can succeed (such as physical strength, sexual precocity, and being street wise); and (c) he adopts a

peer group which reinforces the new set of values and provides positive recognition for delinquent activities. Therefore, delinquent behavior is potentially very effective in protecting and enhancing self-esteem, provided that (a) a peer group is available which will support such negative behavior, and (b) the behavior does not lead to negative consequences of its own which outweigh its benefits for self-esteem.

Gold and Mann's formulation is supported by their data. They showed that both school grades and closeness to parents were predictive of self-esteem (as measured by the Rosenberg self-esteem inventory), among boys who were low in delinquent behavior. However, neither school grades nor family closeness were predictive of self-esteem among boys who were high in delinquent behavior. It was argued that those boys who adopted delinquent behavior were able to shield their conscious self-esteem from the effects of school grades and parental approval (or disapproval). The relevant source of information for self-evaluation had apparently shifted for the delinquent boys, from the school and family to the delinquent peer group. However, when self-esteem was measured projectively, rather than wtih a relatively straight-forward questionnaire, it was positively correlated with family closeness and school grades for all groups, even the most delinquent. These results suggest that, while at a surface or conscious level self-esteem is protected by delinquent behavior, this defense breaks down at a subconscious level, where self-esteem is still affected by the

school and family.

Kaplan (1978) provides the most thorough statement of the position that delinquency is invoked to defend against a derogated self-image, and gives systematic, longitudinal evidence supporting this position (Kaplan, 1980). Like earlier structural interactionists, Kaplan sees the development of the self-concept in microsociological terms; his description of this development rests firmly in the tradition of Mead. Additionally, Kaplan emphasizes the ways in which self-esteem acts as a motive, influencing the value and credibility attributed to others' evaluations. In this respect, his position is similar to that of Rosenberg. Kaplan states that persons whose interpersonal experiences are characterized by an abundance of perceived negative evaluations from others will eventually seek to divorce themselves from the group which generated such evaluations. Thus, repeated failure to meet the expectations of the dominant culture would lead one to adopt a deviant or counter-cultural lifestyle and self-image. To the degree that one is able to define oneself as independent of a membership group, one is insulated against its criticism, real or imagined.

According to Kaplan negative self-attitudes are a result of self-devaluing experiences within a membership group. Negative self-attitudes will lead to deviant behavior if the following conditions are met: (a) the person subjectively associates (either at a conscious or unconscious level) negative self-attitudes with membership group experiences, (b) the

self-rejecting person is unable to defend against experiences within the membership group, and (c) adopting a deviant response pattern does not entail such self-devaluing consequences that it would be useless as a defense. The third condition refers to the availability of deviant response patterns, and social sanctions associated with the response. For instance, delinquency would tend to be most useful as a defense for boys, as it involves a masculine role, the display of physical prowess, and, more often for boys than for girls, a delinquent peer group to lend approval to such activities. Girls, on the other hand, face stronger sanctions against delinquent activities commonly engaged in by boys, which are seen as not only illegal but unfeminine. Indeed, neither Gold and Mann (1972) nor Kaplan (1980) found that delinquency seemed to have the protective or positive effects on the self-esteem of female subjects that it did on that of male subjects. Likewise, boys who are close to their parents find delinquency less available to them as a defense, as it involves giving up an important source of support. Middle class boys, or those from upwardly mobile families, may find themselves faced with particularly high expectations for success combined with strong sanctions against delinquency. Consideration of variations in the availability of delinquency as a defense elucidates earlier observations, that middle-class delinquent boys seemed to differ from lower class delinquents in their acceptance of, and reactions to, a delinquent label (e.g. Jensen, 1972; Cohen, 1965). But unlike earlier theorists, Kaplan uses the same dynamic to explain both

lower class and middle class delinquency. According to Kaplan, the factors involved in creating a delinquent vary quantitatively, not qualitatively, across social class.

Several older studies have been reexamined in light of present theorizing, and have been used to lend support to the notion that delinquency works as a defense against derogation of self-esteem. Hall (1966) found a positive relationship between self-esteem and identification with the delinquent subculture. He suggested that a shift occurs in the career of the delinquent with the adoption of a deviant identity. After this point, the youth evaluates himself in terms of delinquent, rather than conventional values. The adoption of the delinquent role as an identity is likely to be accompanied by a rise in self-esteem, coupled with a resistance to returning to conventional values. Schwartz, Fearn and Stryker (1966) found that among emotionally disturbed in-patient children described as having "behavior (versus personality) problems of and acting out, aggressive nature" (p. 301), therapist's ratings of individual childrens' prognoses were inversely related to the childrens' self-esteem. Schwartz, et al., interpreted these finding as indicating that the more committed one becomes to the role of being emotionally disturbed, the more stable and positive one's self-concept will be. Rathus and Siegel (1973) found that while nondelinquent boys showed a positive relationship between attitudes toward persons and values representative of the dominant social order (e.g., policemen, the law, education, work, saving money, and

opposition to crime) and self-esteem, delinquent boys showed just the opposite relationship. That is, among delinquent boys, negative attitudes toward middle-class values and authority figures are positively correlated with self-esteem. Rathus and Seigel point out that this relationship was weak enough to suggest that there are many delinquents for whom it does not hold. Those for whom it does not hold may be at a less advanced stage of delinquency; that is, they may not have adopted the delinquent role to the extent of having internalized its values over those of the dominant culture.

The most systematic study supporting Kaplan's theory is his own longitudinal study (Kaplan, 1980). This study involved nearly 50% of all seventh grade students in the Houston (Texas) Independent School District; a cross-section of youth with ethnic and socioeconomic backgrounds representative of the population at large. Seventy percent of his subjects were followed up two years later. Kaplan found that: (a) Overall, the self-derogation scores of the sample lowered over the two-year period, indicating a gradual increase in self-esteem similar to that found by Engles in 1959. (b) Those students who were originally high in self-derogation showed the most change in the direction of higher self-esteem. Again, this is consistent with the earlier findings of Engles (1959). (c) Of the students originally high in self-derogation, those who subsequently adopted deviant behavior patterns (i.e., delinquent behavior, substance use and/or other non-normative behavior) showed a

greater decrease in self-derogation than those who continued to act in socially acceptable ways. These findings suggest that the adoption of deviant behavior patterns led to a raise in self-esteem among originally self-degrading students. (d) Self-attitudes appeared to be influenced by the belief that one possessed valued qualities and performed valued behaviors, the belief that one was evaluated favorably by valued others, and the possession of self-protective attitudes that could effectively forestall or mitigate the effects of self-derogating experiences. These influences are consistent with both the efficacy-based notion of self-esteem, and the social interactionist point of view. In addition, self-protective processes, such as those found by Rosenberg, appear to moderate the effects of these processes on self-esteem.

All in all, Kaplan's model seems to effectively accommodate preexisting data, and generates several testable hypotheses. The proposed temporal nature of the relationship between self-esteem and delinquency promises to make some sense of the relationship's apparently ephemeral quality, noted in early bivariate research.

However, Kaplan's work is not without its detractors. His study has been attacked from several fronts for methodological problems. McCord (1975) cites an exceptionally high rate of subject attrition as a major flaw in Kaplan's study; one which may bias the results by excluding subjects who, by virtue of their degree of mobility, systematically differ on potentially

important variables. Wells and Rankin (1983) and McCarthy and Hoge (1984) point out Kaplan's analysis fails to control for theoretically important variables, including grades, peer relations, and family relations; and that by not analyzing the three waves of data simultaneously, Kaplan makes it difficult to determine the actual magnitude of causal effects.

Rosenberg and Rosenberg (1978) used the data from the Bachman (1970) "Youth in Transition" study to test the hypothesis that low self-esteem is predictive of delinquency. They concluded that low self-esteem was more likely to preceed delinquency than visa-versa. This finding lends support to the causal sequence proposed by the defense theorists. However, Bynner, O'Malley and Bachman (1981), applying path analysis to the same data set, found little support for the view that low self-esteem leads to delinquency. Rather, they found that the stronger paths were in the opposite direction, with delinquency apparently leading to lowered self-esteem. Wells and Rankin (1983) have also reanalyzed the "Youth in Transition" data, and concluded that the alleged causal chain from low self-esteem to delinquency was not to be found once the influence of certain prior variables were controlled (e.g. family closeness, school grades). Finally, McCarthy and Hoge (1984), in a study similar in scope to the Bachman (1970) study, but involving current data gathered from a mixed group of students over a three year period, found that the effect of self-esteem on subsequent delinquency was negligible. Like Bynner, et al. (1981), McCarthy

and Hoge found stronger support in favor of the opposite causal sequence; delinquenct behavior was more predictive of low self-esteem than visa-versa.

Even if the time course followed by self-esteem and delinquency was fairly well substantiated, there would still be disagreement as to whether this necessarily means that self-esteem is an essential element in the chain of events that actually cause delinquency (McCord, 1978; Wells and Rankin, 1983). After all, it is still possible that self-esteem and delinquent behavior are both unrelated by-products of a third factor such as family relationships (McCord, 1978). If both self-esteem and delinquency represent unrelated symptoms of an underlying process, then, just as a rash can predict a fever without being the actual cause of that fever (rather, a virus has produced both the rash and the fever), self-esteem can predict delinquency without necessarily being the cause of it.

However, determining whether delinquency is actually caused by low self-esteem is beyond the scope of the present study. Since there appear to be many factors which may predispose a child to delinquency, the question of causality would be addressed best through longitudinal studies, which could systematically control for various known risk factors, both within the environmnent and the constitution of the child. Instead, the present study focuses on the role of juvenile delinquency, once begun, in protecting self-esteem from the effects of the judgments of parents and the school. Does

delinquent behavior work to protect or shield an adolescent's self-esteem in the face of perceived failure and/or rejection within the family and/or school setting? Is this self-esteem enhancement effect a product of delinquency in general, or are some kinds of delinquent behavior more effective than others in this respect?

The purpose of the present study is twofold. First, it seeks to test the self-esteem protective function of delinquent behavior, in a manner similar to that of Gold and Mann (1972). Therefore, the study investigates adolescents boys' perceptions of their school performance and of their family relationships, and the degree to which these perceptions are predictive of self-esteem, given varying levels of delinquent experience. On the basis of the model of delinquency presented above, it was predicted that self-esteem would be affected less by school and family factors for more delinquent boys than for less delinquent boys. In other words, as a youth's level of delinquency increases, the effect of family acceptance and school performance of self-esteem should decrease. This relationship was expected on the grounds that adopting delinquent behavior (and, with it, delinquent values and peers) allows the child to discount the judgements of conventional, socially approved agencies, such as the family and school, in favor of the judgments of and accomplishments within a delinquent peer group.

Second, the present study investigated whether some aspects or forms of delinquent behavior are more effective in defending

self-esteem than are others. To address this question, the four dimensions of delinquency delineated by Kulik and Stein (1968) were used: identification with the delinquent role, parental defiance, substance abuse, and assaultiveness. These four dimensions appear to be statistically independent of one another; that is, the score of a given delinquent on one dimension does not predict his score on a second dimension. (For instance, a person could identify strongly with the delinquent role, be highly defiant of parental authority, occasionally use illegal drugs, and seldom engage in assaultive behavior.) In addition, the dimensions seem to represent qualitatively different types of behavior patterns, which intuitively suggest different predisposing factors (factors either within the environment or the personality of the juvenile).

Specific predictions were made regarding the usefulness of delinquent behavior for enhancing self-esteem by examining separately the effectiveness of behaviors represented in each of the four scales. Neither Kaplan nor Gold examined the effects of different dimensions of delinquency separately. However, their speculations regarding the process by which delinquent behavior works to protect self-esteem (through the accompanying shift in peer group and values) led to the following predictions:

a. "Identification with the delinquent role" was expected to be particularly effective as a moderator variable, as it reflects the shift in values that Kaplan implies is necessary for delinquency to work as a defense.

b. "Parental defiance" was expected to be an effective moderator variable, for two reasons. First, it implies a rejection of parental expectations, which are not likely to have been met by the delinquent youth (exceptions not withstanding). Second, since it is also a direction devaluation of parental opinion, it should be especially effective in shielding the self-esteem from the effects of parental criticism.

c. "Substance abuse" was not expected to be particularly effective as a moderator variable, since the effect of drugs or alcohol on self-esteem seems to be temporary and dependent on the drug-induced state (see Svobody, 1982). When the person is not in the drug-induced state, he/she is exposed to the negative sanctions of the community, without whatever benefits or protection the drug would offer for the self-esteem.

d. Assaultiveness was expected to show little or no effect as a moderator variable for two reasons. First, assaultiveness does not imply self-protective attutudes, as do the first two dimensions. Second, assaultive crime is considered particularly serious by the community, and sanctions against it are relatively severe. Therefore, it was felt that assaultiveness is not the result of the motive to protect or enhance self-esteem, but rather of some other process.

PART B

METHODOLOGY

Subjects

One hundred and five male students in a grade ten class, from Moscrop Junior Secondary School, in Burnaby, British Columbia, were asked to participate in the study. Moscrop School is located in a predominantly middle-income area of the city, with a reletively low rate of unemployment (4% to 6% in 1980), and a low percentage of single parent families (10% to 15% of families in private households)(Statistics Canada, 1981). Of the students asked to participate, sixty five agreed, and returned completed questionnaires. In addition, subjects between ages fourteen and sixteen were solicited from two probation offices, one within the same district as the participating school, and a second within an adjacent district. Letters were sent to probation subjects and their parents, and were followed by a phone call to answer any questions and set appointments. Of approximately 50 probation subjects solicited in this way, only eight consented to participate and actually met with the examiner to fill out the questionnaire. Because of the very low participation rate of the probation subjects, these eight were removed from the study, and only those subjects solicited from the school were included in the analysis. Subjects solicited from the school were told about the study approximately one week in advance, and given letters briefly explaining its purpose and proceedure. They were also given a letter for their parents, which briefly explained the purpose of the study and the experimental proceedure.

Subjects completed several questionnaires, described below. The questionnaires were administered to groups of approximately twenty students, during regular school hours. Subjects were assured that their responses would be private and confidential, and questionnaires were identified by number only. In addition, subjects were reassured that their decision whether or not to participate would not affect their schoolwork/probation in any way.

Measures

The independent variables were as follows:

(a)school performance, as measured by the subject's reported average grade.

(b) school satisfaction, or how positively the subject views his relationship with school personnel and his school performance. This was measured by a questionnaire designed by the author.

(c)family closeness, as measured by the Bachman scale (Bachman, 1970 pp.19-21), and by a questionnaire designed by the author to determine a subject's degree of satisfaction with his family relationships.

(d) overall level of delinquency, as measured by the total score on the Delinquency Checklist (Kulik, Stein and Sarbin, 1968).

(e) identification with the delinquent role, parental defiance, assaultiveness and substance use, as measured by the Delinquency Check List (DCL) (Kulik, Stein and Sarbin, 1968).

Self esteem was measured using the Rosenberg Self-Esteem Inventory (Rosenberg, 1965).

Subjects were asked to complete the following inventories. All questionnaires were given to the subject in a packet, and identified by number only.

(a) The School Satisfaction Questionnaire. This questionnaire was designed by the author to measure the degree of satisfaction the subject feels regarding his school situation. It consists of six items, reflecting relationships with school personel and degree of satisfaction with school performance. Each item is rated on an eleven point Lickert scale. A high score indicates frequent positive interactions with school personel, and a sense of competence in school-related tasks.

(b)The Bachman Family Closeness Scale. This consists of 21 items, with responses arranged in a Lickert fashion, from most positive to least positive. Items reflect four interrelated dimensions: closeness to mother, closeness to father, amount of reasoning with son, and parental punitiveness. Bachman, et. al. (1970) found scores on this scale to be approximately normally distributed among their sample of male grade eleven students, and to correlate positively with self-esteem (R =.36) and school grades (R =.21). A high score on the Bachman Family Closeness Scale indicates a high degree of postive parental involvement, and positive identification with the parents.

(c)The Family Satisfaction Questionnaire. This was designed by the author to measure the degree to which subjects feel accepted

by and accepting of their immediate family members. It consists of five items, each to be rated on an eleven point Lickert scale. A high score on this scale indicates a sense of acceptance within the family, and a high degree of positve interaction with family members. Also included on this quesionnaire is a section asking the subject to indicate the persons included in his family (by relationship, not by name). This section serves the dual purpose of giving the subject a clear idea of who is to be included in his responses to the following items, and giving the researcher an indication of who the subject has actually referred to in his responses.

(d)The Delinquency Checklist. This instrument consists of 60 items, to which the subject responds by indicating the frequency with which he has engaged in the behavior. Responses are given on a zero to five scale, with five indicating a frequently occurring behavior. The DCL generates an overall delinquency score, and four subscales, including identification with the delinquent role, parental defiance, drug use, and assaultiveness.

(e)The Rosenberg Self-esteem Inventory. This inventory consists of 10 items designed to measure global self-esteem, or feelings of self-worth. A high score indicates positive overall feelings of self-worth.

PART C

ANALYSIS

Subjects' records were retained for analysis provided no more than 40% of items for any one scale were left blank. Sixty four cases met this criterion. Missing data points were estimated, using the BMDP program PAM, which derives formulas to estimate missing values based on the two items most highly correlated with the missing item across complete cases. A total of 32 items distributed among 16 cases had values estimated in this way.

Scale scores were derived from item scores in the following manner:

a. Family Satisfaction Scale item scores 1 through 5 were summed to yield a total score, ranging from 0 to 50;

b. School Satisfaction Scale item scores 1 through 7 were summed to yield a total score, ranging from 0 to 10;

c. The Bachman Family Closeness scale item scores were summed to yield a total score between 21 and 100;

d. Grade Point Average was defined as the subject's self-estimated average letter grade, converted to a four point scale, with A=4, B=3, C=2, and D=1. Plus or minus indicators were scored + or - .3. For (e.g., B+=3.3);

e. Delinquency Check List scores and subscores were derived from the square root of the sum of item scores;

f. Self-esteem scale item scores were summed to yield a score between 10 and 40. Descriptive statistics were obtained for each variable (see Appendix B).

The BMDP program P9R was used to determine R^2 values for regression equations involving various combinations of the family and school measures and the Delinquency Checklist total and subscale scores as independent variables. Self-esteem was the dependent variable. The BMDP program gives R^2 values for equations in which the Delinquency Checklist was used both as a simple independent variable and as a moderator variable. It also gives inter-scale correlations for all scales involved.

As a first step, the P9R program was run using the Bachman Family Closeness Scale (BFCS), Grade Point Average (GPA), and the total delinquency score from the Delinquency Checklist (DCLT). The delinquency measure was expressed as a moderator through the addition of two product terms, '(DCLT X BFCS)' and '(DCLT X GPA)'. Although the program gives R^2 values for all possible subsets of variables included, only those subsets which included a combination of independent variables (e.g., BFCS, GPA, and DCLT) or which included one or both product terms as independent variables were considered. In this manner, R^2 values were obtained for the equation representing delinquency as a moderator variable {(a)(BFCS) + (b)(GPA) + (c)(DCLT) + (d)(BFCS X DCLT) + (e)(GPA X DCLT)}, the equation representing delinquency as an independent variable, with no moderator effect {(a)(BFCS) + (b)(GPA) + (c)(DCLT)} and an equation using only

the Bachman Family Closeness Scale and Grade Point Average, without the Delinquency Checklist Total as an independent or a moderator variable. The program was then repeated, substituting each of the delinquency subscales (delinquent role, parental defiance, drug use, and assaultiveness) for the total delinquency scale score. Finally, the program was repeated for a third time, first using the total delinquency scale score, then substituting each subscale in turn, with the Family Satisfaction Scale (FS) and the School Satisfaction Scale substituted for the Bachman Family Closeness Scale and Grade Point Average.

PART D

RESULTS

Interscale correlations are shown in Table 1.

As can be seen in Table 1, the Family Satisfaction Scale and the Bachman Family Closeness Scale are highly correlated, suggesting that the two scales do indeed measure a very similar construct. In addition, school satisfaction and GPA are correlated to a moderate degree, consonant with expectations. As can be seen in Tables 2 and 3, 2Interitem correlations: Family Satisfaction 3Interitem correlations: School Satisfaction both the Family Satisfaction Scale and the School Satisfaction Scale demonstrate high internal consistancy, indicated by inter-item correlations.

Although for the purpose of the analysis, measures of school satisfaction, GPA, family closeness, and family satisfaction were treated separately, there were high correlations between scales measuring similar constructs (e.g. quality of family interactions; comfort and/or competence in school setting). These scales also tended to operate similarly in regression equations. For this reason, in the following discussion of results, these scales will be referred to collectively, as "school" measures, "family" measures, or "school and family" measures.

Family and school measures are consistently correlated positively with self-esteem, although to a moderate degree. The Delinquency Checklist total delinquency score has close to a zero-order correlation with self-esteem, and a negative

Table 1.

Interscale correlations

	BFCS	GPA	DCLT	DCLPD	DCLROLE	DCLDRUG	DCLA	FS	SS	SE
BFCS	1.000									
GPA	0.394	1.000								
DCLT	-0.421	-0.459	1.000							
DCLPD	-0.462	-0.316	0.659	1.000						
DCLROLE	-0.359	-0.516	0.933	0.494	1.000					
DCLDRUG	-0.275	-0.420	0.830	0.497	0.801	1.000				
DCLA	-0.255	-0.269	0.816	0.475	0.694	0.713	1.000			
FS	0.739	0.447	-0.535	-0.477	-0.469	-0.458	-0.386	1.000		
SS	0.532	0.703	-0.583	-0.429	-0.586	-0.542	-0.395	0.694	1.000	
SE	0.376	0.285	0.021	-0.182	0.084	0.066	0.073	0.367	0.395	1.000

Table 2.

Interitem correlations: Family Satisfaction

items	1	2	3	4	5
1	1.000				
2	0.472	1.000			
3	0.495	0.210	1.000		
4	0.575	0.369	0.201	1.000	
5	0.609	0.264	0.394	0.789	1.000

Table 3.

Interitem correlations: School Satisfaction

items	1	2	3	4	5	6	7
1	1.000						
2	0.797	1.000					
3	0.501	0.441	1.000				
4	0.260	0.304	0.379	1.000			
5	0.635	0.567	0.209	0.153	1.000		
6	0.738	0.603	0.437	0.247	0.589	1.000	
7	0.711	0.664	0.422	0.264	0.638	0.660	1.000

correlation with family and school measures.

In short, delinquency was unrelated to self-esteem. All delinquency subscale measures, with the exception of parental defiance, conformed to the former pattern. In contrast, Parental Defiance shows a small but significant negative correlation (R^2=-0.182) with self-esteem. In other words, high degrees of parental defiance were associated with low self-esteem. This finding will be discussed later.

The adjusted R^2 values for each combination of variables tested as predictors of self-esteem are reported in Table 4.

In all cases, product terms failed to add significantly to the variance accounted for by the independent variables alone. In other words, in no case does the use of any delinquency measure, whether the total delinquency score or any subscore of the Delinquency Checklist as a moderator variable, improve the predictive power of the equation. As a moderator variable, the Delinquency Checklist has no effect.

However, as an independent variable, the DCL does have an effect on the equation. The DCL significantly improves the amount of variance accounted for by the equation, over that accounted for by any combination of one school and one family measure alone. This is true for all delinquency subscores except parental defiance, which does not significantly improve the adjusted R2 from that obtained by family and school measures alone.

Table 4.

R^2 and T-statistics for each variable

Variable Subset	R^2	β_1	T-stat	β_2	T-stat	β_3	T-Stat	β_4	T-Stat	β_5	T-stat
BFCS, GPA	0.135924	0.1165	2.45	0.108088	1.27						
BFCS, GPA, DCL	0.196527	0.1499	3.12	0.1808	2.07	0.5507	2.37				
BFCS, GPA, DCL (B X D), (G X D)	0.197631	0.2537	2.14	-0.0043	-0.02	1.1232	0.80	-0.0194	-0.96	0.382	0.94
BFCS, GPA, Parental Defiance	0.121774	0.1192	2.29	0.1096	1.27	0.0962	0.13				
BFCS, GPA, Parental Defiance (B X P.D.), (G X P.D.)	0.098681	0.211	1.36	0.614	0.17	2.7951	0.61	-0.0411	-0.64	0.0222	0.13
BFCS, GPA, Delinquent Role	0.238134	0.1439	3.16	0.2255	2.54	1.1349	3.03				
BFCS, GPA, Del. Role (B X D.R.), (G X D.R.)	0.236279	0.2626	2.24	0.0699	0.43	2.7706	1.09	-0.0406	-1.13	0.0597	1.06
BFCS, GPA, Drug Use	0.184364	0.1298	2.78	0.1749	1.98	0.9976	2.13				
BFCS, GPA, Drug Use (B X Drug), (G X Drug)	0.19579	0.1855	2.93	0.0826	0.79	2.4565	0.75	-0.0574	-1.33	0.1230	1.32
BFCS, GPA, Assaultiveness	0.166297	0.1308	2.76	0.1371	1.61	1.2968	1.80				
BFCS, GPA, Assaultiveness (B X A), (G X A)	0.160535	0.1558	2.97	0.0940	0.98	3.4916	0.73	-0.0728	-1.15	0.1385	0.84
Family Satisfaction, School Satisfaction	0.145809	0.1029	1.11	0.0943	1.67						
FS, SS, DCL	0.258347	0.1664	1.88	0.1565	2.80	0.7677	3.20				
FS, SS, DCL (F X D), (S X D)	0.245802	0.29605	1.26	0.1690	1.17	0.6243	1.74	-0.0815	-0.054	-0.0030	-0.12
FS, SS, PS	0.132128	0.1082	1.11	0.0960	1.67	0.1441	0.20				
FS, SS, PD; (F X D), (SS X PD)	0.109126	0.1377	0.43	0.1695	0.91	1.9560	0.54	-0.0027	-0.02	-0.0365	-0.44
FS, SS, DR	0.204087	0.1380	1.64	0.1821	3.27	1.4367	3.86				
FS, SS, DR (FS X DR), (SS X DR)	0.300814	0.4071	1.71	0.1190	0.41	3.72286	2.05	-0.0744	-1.18	0.0203	0.53
FS, SS, Drug Use	0.263418	0.14156	1.63	0.15834	2.84	1.5613	3.28				
FS, SS, Drug, (FS X Drugs) (SS X Drug)	0.247039	0.21949	1.59	0.1053	1.22	2.0590	1.04	-0.0600	-0.78	-0.0476	-0.48
FS, SS, Assaultiveness	0.211192	0.1406	1.56	0.1203	2.18	1.81347	2.46				
FS, SS, A, (FS X A) (SS X A)	0.204261	0.1889	1.76	0.1338	2.16	3.2080	1.71	-0.0380	-0.31		

BFCS=Bachman Family Closeness Scale; GPA=Grade point average; DCL=Delinquency Checklist, total score; FS=Family Satisfaction; SS=School Satisfaction; A=Assaultiveness; PD=Parental Defiance; DR=Delinquent Role; DRUG=Drug Usage.

PART E

DISCUSSION

The main hypothesis of the study, that juvenile delinquency would moderate the relationship between measures of family and school satisfaction and global self-esteem, is not supported by the current study. However, caution should be exercised in accepting the null hypothesis also, for reasons to be presented in the following pages. Although the outcome of the current study is inconsistent with findings by Kaplan (1978) and Gold and Mann(1972), it is consistent with several other studies (Wells and Rankin, 1983;Bynner, 1981; McCarthy and Hoge, 1984).

The failure to find a moderator effect, using either the total delinquency score or any subscale of the Delinquency Checklist, suggests that the defense model of delinquency is inadequate, at least when applied to those forms of relatively mild delinquency found in a grade ten public school class. More specifically, these results suggest that, at the least, delinquency is a very ineffective defense against the effects of poor school performance or negative family relationships (Wells and Rankin, 1983; Bynner, 1981; McCarthy and Hoge, 1984). The Delinquency Checklist fails to significantly moderate the effects of these factors, even on a measure of self-esteem as global and face valid as the Rosenberg Self-Esteem Scale. If it is assumed that in order to be termed a "defense mechanism", an action or attitude must actually work, to some degree, to defend that which is in danger (in this case, self-esteem), then the present findings do not support the defense model of delinquency.

The strong role of delinquency as an independant variable was somewhat unexpected. All of the delinquency scales, except parental defiance, worked to significantly improve the adjusted R2 (percent of variance accounted for) over that obtained by school and family measures alone. At the same time, all of the delinquency scales except parental defiance showed near-zero correlations with self-esteem, and correlated negatively with school and family measures. Given this constellation of relationships, the Delinquency Checklist is best construed as a suppressor variable.

The effect of a suppressor variable differs from that of a moderator variable. A moderator variable is one which changes the relationship between predictor variables and a dependent variable. Given certain predictor variables, the dependent variable is more or less predictable at different levels of the moderator variable. If delinquency was effective here as a moderator variable, one could expect self-esteem to be more predictable given a low level of delinquency than it would be given a high level of delinquency.

A suppressor variable works in combination with one or more predictor variables, each containing some variance which is related to the dependent variable in a meaningful way, and some which is not. The role of the suppressor variable is to counteract that part of the variance on the predictor variables which does not enhance (and may, in fact, "hurt") the prediction equation, but which can be attributed to a third, more or less

irrelevant factor. In the present study, it appears that the DCL is working to suppress part of the variance on the school and family measures which does not contribute to the positive correlation between school and family measures and self-esteem. In others words, these relationships suggest that part of the variance on the school and family measures is not positively correlated with self-esteem. However, the undesireable variance on the school and family measures is counterbalanced by the Delinquency Checklist. Therefore, the Delinquency Checklist improves the predictive power of the independent variables, without being strongly correlated with self-esteem.

There are several possible explanations for the failure of the present study to support the defense model of delinquency. The first possibility is that the model itself is faulty. This possibility has already been suggested by several authors who found little or no support for the model (Bynner, et al., 1981; Wells and Rankin, 1983; McCarthy and Hoge, 1984). McCord (1975) has suggested that self-esteem, desite its immense intuitive appeal, is basically an irrelevant by-product of the family processes which give rise to delinquency. Like Wells and Rankin (1983), McCord has voiced concern that the self-esteem question may divert attention away from more fruitful approaches to delinquency, such as family intervention.

However, given the present results, if one forsakes the defense model of delinquency, then the unexpected effect of the Delinquency Checklist as an independent variable is unexplained.

The Delinquency Checklist appears to act as a suppressor variable, counteracting some significant portion of the variance on the school and family measures. Any explanation of the results of this study needs to address the suppressor variable problem: In short, what specifically accounts for the "suppressed" variance on the school and family measures? Besides delinquency, what might the Delinquency Checklist reflect, which would counteract the source of the suppressed variance? The presence of the suppressor variable effect defies an intuitive explanation which does not challenge the validity of at least one of the scales involved. Therefore, the results require that, before judgment is passed on the defense model of delinquency, careful consideration be given to methodological questions concerning the scales involved. This is especially important given the confusion and disharmony which has historically surrounded definitional issues in delinquency research.

Critics of the self-report method in delinquency research have argued that the scales typically used to measure delinquency consist largely of trivial offenses, and that items reflecting truly delinquent behavior do not generate sufficient variance to enter into statistical analyses (Clelland and Carter, 1980; Hindelang, Hirschi and Weis, 1979). In other words, items reflecting seriously delinquent behavior tend to get "swamped out" of the analysis by those items reflecting more normative, and less serious vices. For example, it is common for delinquency scales to give equal weight to the acts of skipping

school and breaking into a building. The adolescent who commits minor status offenses frequently may score as high as, or higher than, the adolescent who commits serious offenses on occasion. The problem of underrepresentation of serious offenses on self-report scales is compounded by a restricted range of subjects in studies which, like the present one, employ members of a high school class as subjects. Members of a high school class are not a random sample of an age cohort. Rather, they represent those individuals who are doing well enough within conventional systems to have remained within them thus far. Seriously troubled adolescents are more likely to have dropped out of the system by grade ten, leaving, from the researcher's perspective, a sample biased in the direction of nondelinquency. One consequence of this bias is that the sample shows very little variance on scale items reflecting major violations. In addition, the use of a scale weighted towards trivial offenses makes it very tempting to interpret the variance which is observed as reflecting various degrees of delinquent orientation, when such an interpretation is not warranted. The Delinquency Checklist was validated on its ability to distinguish between delinquent and nondelinquent groups of subjects, and on its ability to distinguish between discreet catagories of delinquent adolescents (Kulik, Stein, and Sarbin, 1968), but not on its ability to distinguish between various degrees of acting out behavior among an essentially nondelinquent population. Indeed, delinquency may be a qualitative, rather than a quantitative phenomenon, and varying

degrees of rebelliousness within a basically nondelinquent population may not be comparable to the degrees of rebelliousness that constitute true delinquency.

Brown (1985) suggests two solutions to the restricted range problem in delinquency research which utilizes self-report questionnaires. First, he suggests the use of measures that differentiate between violations on grounds of seriousness. This would be useful in a population which included a significant number of major offenders. In a case such as the present study, differentiating between major and minor offenses would be useful only in renaming the variance observed as specifically having to do with minor offenses, since the variance accounted for by major offenses is quite small.

Second, Brown suggests the use of a disproportionate stratified sample, drawn from two populations known to differ sharply in degree of self-reported delinquency, such as members of a grade ten class and adolescents serving probation. This solution is particularly attractive because it allows the researcher to attain sufficient variance on delinquency, while maintaining control over other theoretically important variables. For example, for the purposes of the present study, it was desireable to choose a sample for whom, theoretically, delinquency is an available defense, with relatively strong support and few harsh negative sanctions. From this standpoint, tenth grade boys represented the ideal population on which to test the defense model. The fact that all were residing with

their families and attending school supports the assumption that, as a group, they tended not to have suffered the more severe societal sanctions applied to young offenders. By virtue of their age and early adolescent status, not only are they exposed to a number of negative role models, but they are just old enough to have access to delinquent activities (e.g. alchohol, drugs and sex), values and "hang-outs" (e.g. arcades, a downtown core). All of these conditions could be maintained using subjects from two populations: a grade ten class and a sample of adolescents serving probation while living at home and attending school. However, the attempt within the present study to create a stratified sample by recruiting boys on probation was unsuccessful, due to an excessively high refusal rate among the probationers (nearly 80%). Thus, the restricted range problem in self-report measures of delinquency creates a serious problem for the interpretation of the present results, if the Delinquency Checklist is to be interpreted as reflecting a truly delinquent orientation.

For the purpose of unravelling the relationship between the Delinquency Checklist and the remaining variables, it is necessary to ask: What does the Delinquency Checklist reflect, when applied to this sample, if not delinquency? A close examination of response tendencies on individual items yields some clues to the nature of the DCL (as well as the nature of adolescent boys). High-endorsement (and, in this case, high variance) items on the DCL for this sample seem to roughly

reflect two tendencies. The first tendency is to engage in behaviors which society considers appropriate for adults, but inappropriate for children (e.g., drinking wine or beer, engaging in sexual intercourse, driving a car). The second is a tendency to assert one's will in defiance of authority (e.g., defying a parent, coming late to or skipping school). The two tendencies no doubt overlap, as many activities which are beyond one's age also require some flaunting of authority to accomplish (e.g., obtaining a phoney I.D.). A few items might be considered to reflect "rites of passage" among some teenagers (e.g., staying out past midnight without an adult). At this low level of delinquency, it appears that the Delinquency Checklist should be considered a reflection, not so much of delinquent tendencies, but of a willingness to question authority and to test the limits of adult tolerance in an attempt to break out of the child role. This tendency, although sometimes creating difficulty for adults, can also reflect the adolescent's steps toward developing an autonomous ego or identity.

To summarize, it appears that the Delinquency Checklist scales (with the exception of Parental Defiance) partially reflect, in this population, the tendency to engage in certain adult behaviors prematurely, and self-assertion (sometimes in the form of minor oppositionalism) in the service of a developing sense of autonomy.

What, then, is this measure of self-assertion working to counter in the regression equation? The family and school

measures may reflect not only genuine satisfaction and competence, but also a need to take a psychologically "safe" position, where authority is not challenged and the child role (along with its idealized parental images) is maintained. This interpretation is particularly plausible in the case of subjects who are very low in their endorsement of DCL items such as those described above. Such subjects present as, somehow, "too good"; they may lack the self-assertiveness seen in bolder youth.

The second question that emerges in solving the problem of the suppressor variable is: What, within the family and school measures, does the DCL work to counteract? Besides genuine satisfaction and security within the school and home settings, the family and school measures may reflect, among some subjects, a reluctance to question or to criticize authority. The reluctance to criticize, reflected in very high scores on school and family measures, stands out in stark constrast to the mildly defiant stance reflected in relatively high scores on the Delinquency Checklist. Both measures reflect attempts to deal with the adolescent issues of autonomy and independence. However, in the first case autonomy is avoided, while in the second, it is actively pursued.

The pattern which emerges in the regression equations involving the DCL scores can now be considered in light of the adolescent developmental issues of autonomy and attachment, with various score configurations representing coping styles. First, consider the subject who scores very high on school and family

satisfaction, and very low in delinquency. Such an adolescent may be expressing not only genuine satisfaction and competence, but also a need to take a psychologically "safe" position, where authority is not challenged and the submissive child role is maintained. The very low DCL score counterbalances the high scores on school and family satisfaction, predicting only moderately high self-esteem among subjects with this pattern of scores.

On the other hand, consider the subject who scores high, not only on school and family satisfaction, but on the DCL as well. This subject, although scoring higher on the DCL than many of his classmates, is not likely to have been in trouble with the law, or to have committed a serious crime. He is likely to have occasionally stayed out late, skipped school, drunk liquor, driven a car without a license, and/or committed other comparable "offenses". His experimenting with self-assertion and the limits of adult tolerance is done from the safe position of secure family attachments and a basic sense of competence in schoolwork. This subject's predicted self-esteem score is quite high. [1]

---

[1]It should be emphasized that this profile does not apply to truly delinquent youth. The relatively strong negative correlations between delinquent behavior and family satisfaction (R^2=-0.535) and school satisfaction (R^2=-0.583) should assure the concerned parent that the boy who sees his family and schoolwork in positive terms is not likely to engage in seriously delinquent behavior. It is not the author's intention to imply that a certain amount of truely delinquent behavior is "healthy"; rather, the DCL may be contaminated, in a sense, by relatively innocuous behaviors which represent, for the adolescent, self-assertion. It is these behaviors which have featured most prominently in the present analysis.

Those subjects who score low on family and school satisfaction measures have low predicted self-esteem scores, as one would intuitively expect. In addition, as the defense model of delinquency would predict, of the subjects with low school and family satisfaction, those who score relatively high on the DCL have higher predicted scores on self-esteem than do those who score low on the DCL. However, it should be emphasized that any conclusions regarding subjects low in school and family satisfaction are an extrapolation from the outcome of the present analysis, since the actual distribution on family and school measures (with the exception of GPA) was quite heavily skewed in the positive direction. Firmer conclusions regarding those subjects low on family and school measures could be drawn from an analysis of variance, which would require more subjects.

The one subscale of the DCL which appears to act as neither a suppressor nor moderator variable is parental defiance (DCLPD). This is interpretable in terms of the relationship between the struggle for autonomy, or self-assertion, and the need for parental acceptance and support described above. Unlike the behavior indicated on other subscales, parental defiance is a direct expression of the quality of the parent-child relationship, at least from the child's point of view. If the child is engaging in a high degree of direct defiance, then it is likely that he/she is not experiencing a strong sense of support and acceptance from those parents. Since parental support is essential to the process of self-definition, parental

defiance is not likely to reflect the self-assertive properties reflected in the other DCL scales. On the contrary, it indicates a lack of parental support necessary for a healthy process of ego development to occur. Since parental support, or lack of it, is already reflected in the family satisfaction and family closeness scales, it is not suprising the DCL parental defiance scale does not account for any additional variance.

In conclusion, the present findings may not be as damning to the defense model of delinquency as it may appear at first glance. Given a population which tends to be high in school and family satisfaction and low in delinquency, the study that emerges should not be considered a definitive test of the defense model of delinquency. The variance observed in a measure of delinquency, such as the DCL, among a group of nondelinquent adolescents, seems best interpreted in terms other than a tendency toward what most would consider a delinquent lifestyle. At least in part, such variations appear to reflect an active striving toward autonomy and away from the child role. Variance observed in measures of school and family satisfaction appears to reflect not only "true" satisfaction and security, but also, for some, the adoption of a psychologically safe, nonchallenging stance toward authority.

Given the above interpretations of the scales involved, the present results may reflect varying stages in the process of ego development. It would appear that the highest levels of self-esteem are expected among those subjects who are actively

testing limits and challenging authority, while confident of their place in an accepting family and their competence in school. Those subjects who endorse positive views of family and school, but show very low tendencies to act out in ways offensive to adults seem to reflect a mild lack of confidence or security, as evidenced by lower predicted scores on self-esteem.

There is some suggestion that subjects who are low in school and family satisfaction may score higher on self-esteem if they tend to engage in delinquent activity than if they do not. However, this conclusion requires extrapolation from the present study, which, due to low numbers of subjects low in family and school satisfaction as well as a restricted range of delinquent behavior, is inadequate to test the role of a delinquent lifestyle in enhancing self-esteem among such adolescents. Future research designed to test this model should concentrate on the problems of defining delinquency and choosing an appropriate population, so that the range of subjects covered by the research actually includes an adequate number of troubled adolescents. Extrapolating from samples of normal adolescents to draw conclusions about delinquency in general seems to be dangerously misleading. This is especially true when the sampling involves the inadvertent elimination of subjects who drop out of the conventional school system early, as in the present case, and/or who tend to be transient, as in the case of previous longitudinal research.

REFERENCES

Bachman, J.G. (1970) Youth in Transition. Vol. II. The Impact of Family Background and Intelligence on Tenth-Grade Boys. Braun-Brumfield, Inc. Ann Arbor, Michigan

Bachman, J.G., Green, S., Wirtanen, I.D. (1971). Youth in Transition, Vol. III. Dropping Out--Problem or Symptom? Braum-Brumfield, Inc. Ann Arbor, Michigan.

Becker, H.S. (1963). Outsiders: Studies in the sociology of deviance. New York. Free Press.

Brown, S.E. (1985). The class-delinquency hypothesis and juvenile justice system bias. Sociological Inquiry. 55 p. 212.

Bynner, J.M., O'Malley, P.M., & Bachman, J.G. (1981). Self-esteem and delinquency revisited. Journal of Youth & Adolescence. 10 (6), 407-441.

Chapman, I. (1966). Role and self-concept assessments of delinquents and nondelinquents. Sociological Quarterly, 1, 373-379.

Chassin, L. Presson, C. Young, R.D., & Light, R. (1981). Self-concepts of Institutionalized Adolescents: A framework for conceptualizing labeling effects. Journal of Abmormal Psychology, 90, 143-151.

Cohen, A.K. (1955). Delinquent Boys. Glencoe, Illinois: Free Press.

Cohen, A.K. (1965) The sociology of the deviant act: Anomie theory and beyond. American Sociological Review, 30, 5-14.

Cole, C.W., Detting, E.R., & Himble, J.E. (1967). Non-linearity of self-concept discrepancy: the value dimension. Psychological Reports, 21, Aug, 58-60.

Cole, E., & Kumchy, C.I.G. (1981). The CIP battery: Identification of depression a juvenile delinquent population. Journal of Clinical Psychology 37 (4), 879-884.

Deitz, George, E. (1969). A comparison of delinquents with nondelinquents on self-concept, self-acceptance, and parental identification. Journal of Genetic Psychology, 115 (Dec), 285295.

Di Cindio, L.A., Floyd, H.H., Wilcox, J., & McSeveny, D.R. (1983). Race effects in a model of parental-peer orientation. Adolescence, 18 (70): 369-379.

Elkind,, David, (1980). Strategic interactions in early adolescence. in Joseph Adelson, Handbook of Adolescent Psychology. John Wiley & Sons, New York.

Ellis, D.W., & Davis, L.T. (1982). The development of selfconcept boundaries across the adolescent years. Adolescence, 17, 695-710.

Engel, M. (1959). Self-concept stability. Journal of Abnormal & Social Psychology, 58, 211-215.

Erikson, Erik, H. (1959). Identity and the life cycle. Psychological Issues, 1, 18-171.

Fenwick, C.R. (1982). Juvenile court intake making: the importance of family affiliation. Journal of Criminal Justice, 10 (6), pp. 443-453.

Gecas, V. (1971). Parental behavior & dimensions of adolescent self-evaluation. Sociometry, 34, 466-482.

Gecas, 1982. The self-concept. American Review of Sociology, 8, 1-33.

Gecas, Victor, & Schwalbe, Michaell (1983) Beyond the looking-glass self: Social structure and efficacy-based self-esteem. Social Psychological Quarterly, 46 (2), 77-88.

Gold, M., & Mann, D. (1972). Delinquency as defense. American Journal of Orthopsychiatry, 42, (3), 463-479.

Hall, P.M. (1966). Identification with the delinquent subculture and level of self-evaluation. Sociometry, 29, 146-158.

Herzberger, S.D., Dix, T., Erlebacher, A., & Ginsberg, M. (1981). A developmental study of social self-conceptions in adolescence: impressions & misconceptions. Merrill-Palmer Quarterly, 27, 15-29. cognitive developmental theory.

Jensen, (1972). Delinquency & adolescent self-conceptions. A study of the personal relevance of infraction. Social Problems, 20, 84-103.

Josselson, R. (1980). Ego Development in Adolescence. In Joseph Adelson, Handbook of Adoescent Psychology. New York, NY: John Wiley & Sons, Inc., 188-210.

Hindelang, M.J., Hirshci, T., & Weis, J.G. (1981). Measuring Delinquency. Beverly Hills, CA: Sage Publications, Inc.

Kaplan, H.B. (1975). Self-Attributes and Deviant Behavior. Pacific Palisades: Goodyear Publishing Company Inc.

Kaplan, H.B. (1975). Deviant behavior & self-enhancement in adolescence. Journal of Youth and Adolescence, 8 253-277.

Kaplan, . (1980). Deviant Behavior in Defense of Self. New York. Academic Press.

Kitsuse, J.I. (1962). Societal reaction to deviant behavior: Problems of theory & method. Social Problems, 9, 247-257.

Kitsuse, J.I. (1975). The new conception of deviance and its critics. In W. Gove (Ed.), The Labeling of Deviance. New York: Halsted, 1975. pp. 273-284.ory.

Kulik, , Stein, , & Sarbin . (1968). Dimensions and patterns of adolescent antisocial behavior. Journal of Consulting & Clinical Psychology, 34 (4), 375-382.

Marcia, J.E. (1980). Identity in Adoloescence. In Joseph Adelson, Handbook of Adolescent Psychology. New York, New York: John Wiley & Sons, Inc., 159-187.

Marhon, R.C., Offer, D., & Ostrov, E. (1971). Juvenile delquents view their impulsivity. American Journal of Psychiatry, 128 418-423.

Matteson, R. (1974). Adolescent self-esteem, family communication, and marital satisfaction. Journal of Psychology, 86, 35-47.

McCarthy, J.D., & Hoge, D.R. (1982). Analysis of the age effects in longitudinal studies of adolescent self-esteem. Development Psychology, 18, 372- 379.

McCord, Joan. (1975). Comments of "self-esteem and deliquency". Journal of Youth and Adolescence, 7, 291-293.

Mead, G.H. (1934). Mind, Self, and Society. Chicago: University of Chicago Press.

Offer, Ostrov & Howard. (1981). The Adolescent. New York: Basic Books.

O'Malley, P.M., & Bachman, J.G. (1983). Self esteem: change & stability between ages 13 & 23. Developmental Psychology, 19 (2), 257-268.

Protinsky, H., & Farrier, S. (1980). Self-image change in preadolescents and adolescents. Adolescence, 15, 88 7-893.

Rathus, S.P., Siegel, L.J. (1973). Delinquent attitudes and self esteem. Adolescence, 8 (30). Summer. pp. 265- 275.

Reckless, W. (1967). The Crime Problem. Fourth Edition. New York: Appelton-Century-Crofts.

Reckless, W.C., Dentz, S., & Murray, E. (1956). Self concept as an insultator against delinquency. Americal Sociological Review, 21, 744-46.

Rosenberg, M. (1965). Society and the Adolecent Self-Image. Princton, N.J: Princeton University Press.

Rosenberg M. (1963). Parental interest & children's selfconceptions. Sociometry, 26, 35-49.

Scarpiti, F.R. (1965). Delinquent and nondelinquent perceptions of self, values & opportunity. Mental Hygine, 49, 399-404.

Schwartz, M., Feam, G.F.N., & Stryker, S.A. (1966).A Note on self-conception and the emotionally disturbed role. Sociometry, 29, 300-305.lescents. Adolescence, 15, 88 7-893.

Schwartz, M. & Tangri, S. (1965). A note on self-concept as an insulator against delinquency. American Sociological Review, 30, 922-926.

Silber, E. & Tippett, J.S. (1965). Self-esteem: Clinical assessment and measurement validation. Psychological Reports, 16, 1017-1071.

Simmons, R.G., Rosenberg, F. & Rosenberg, M. (1973). Disturbance in the self-image at adolescence. American Sociological Review, 38, 553-568.

Svobodny, L. (1982). Biographical, self-concept and educational factors among chemically dependant adolescents. Adolescence 17, 847-853.

Wells, L. E. (1978). Theories of deviance and the self-concept. Social Psychology, 41, 189-204.

Wells, L.E. & Rankin, J.H. (1983). Self-concept as a mediating factor in delinquency. Social Psychological Quarterly, 46 (1), 11-22.

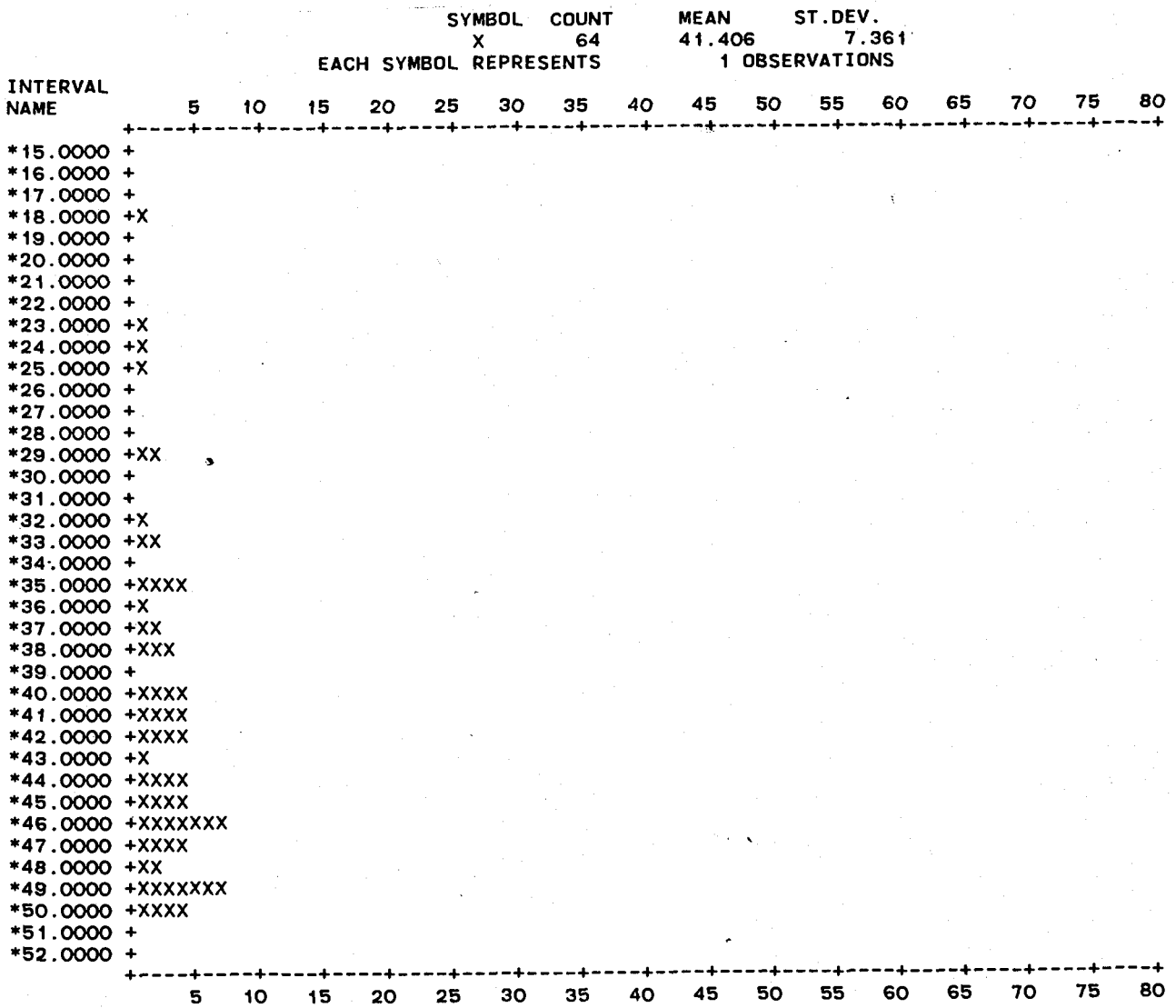
White, R.W. (1963). Ego and reality in psychoanalytic theory. Psychological Issues, International Universities Press.

PART F

APPENDICES

APPENDIX A: HISTOGRAMS ILLUSTRATING SCORE DISTRIBUTIONS FOR EACH VARIABLE

Histogram of Family Satisfaction score distribution.



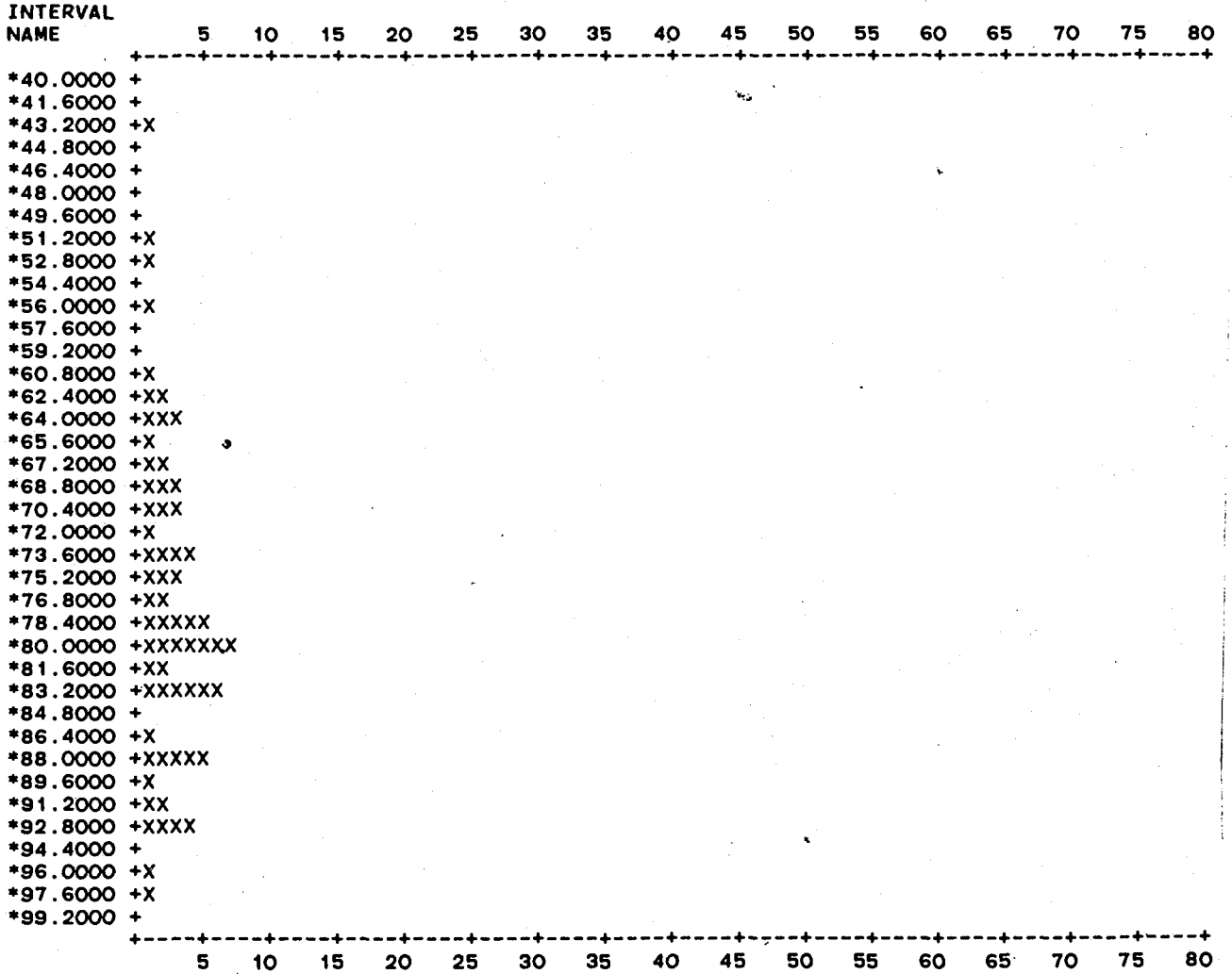
Histogram of School Satisfaction score distribution.

```
HISTOGRAM OF VARIABLE   99 SS
                                    SYMBOL  COUNT      MEAN      ST.DEV.
                                      X       64      44.672      12.120
                              EACH SYMBOL REPRESENTS          1 OBSERVATIONS
INTERVAL
NAME          5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
*14.0000  +
*15.4000  +X
*16.8000  +
*18.2000  +X
*19.6000  +
*21.0000  +X
*22.4000  +X
*23.8000  +
*25.2000  +X
*26.6000  +X
*28.0000  +X
*29.4000  +XXX
*30.8000  +
*32.2000  +XXX
*33.6000  +
*35.0000  +XX
*36.4000  +X
*37.8000  +X
*39.2000  +
*40.6000  +X
*42.0000  +XXXX
*43.4000  +XXXXX
*44.8000  +XX
*46.2000  +XXX
*47.6000  +XXX
*49.0000  +XXXXX
*50.4000  +XX
*51.8000  +
*53.2000  +XXXXXX
*54.6000  +X
*56.0000  +XXXX
*57.4000  +XXX
*58.8000  +XX
*60.2000  +X
*61.6000  +X
*63.0000  +XX
*64.4000  +X
*65.8000  +X
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
               5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80
```

Bachman Family Closeness Scale score distribution.

SYMBOL	COUNT	MEAN	ST.DEV.
X	64	76.234	11.294

EACH SYMBOL REPRESENTS 1 OBSERVATIONS



Grade Point Average distribution.

SYMBOL	COUNT	MEAN	ST.DEV.
X	64	23.640	6.335

EACH SYMBOL REPRESENTS 1 OBSERVATIONS

```
INTERVAL
NAME          5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   8
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----
*10.4000  +XX
*11.2000  +
*12.0000  +
*12.8000  +
*13.6000  +
*14.4000  +
*15.2000  +X
*16.0000  +
*16.8000  +
*17.6000  +XXXXX
*18.4000  +
*19.2000  +
*20.0000  +XXXXXXXXXXXXXXXXXXXXXX
*20.8000  +
*21.6000  +
*22.4000  +
*23.2000  +XXXXXXXXXXXX
*24.0000  +
*24.8000  +
*25.6000  +X
*26.4000  +
*27.2000  +
*28.0000  +
*28.8000  +
*29.6000  +
*30.4000  +XXXXXXXXXXX
*31.2000  +
*32.0000  +
*32.8000  +
*33.6000  +XXXX
*34.4000  +
*35.2000  +
*36.0000  +
*36.8000  +
*37.6000  +X
*38.4000  +
*39.2000  +
*40.0000  +XX
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
               5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80
```

Delinquency Checklist, total score distribution.

```
                                    SYMBOL   COUNT      MEAN      ST.DEV.
                                      X        64       5.383       2.412
                            EACH SYMBOL REPRESENTS          1 OBSERVATIONS
INTERVAL
NAME              5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   8(
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
*0.00000  +
*.370000  +
*.740000  +
*1.11000  +
*1.48000  +
*1.85000  +
*2.22000  +
*2.59000  +XXXXX
*2.96000  +XX
*3.33000  +XXXXXX
*3.70000  +XXXX
*4.07000  +XXXX
*4.44000  +XXXXX
*4.81000  +XXXXXX
*5.18000  +XXXXX
*5.55000  +XXXXXX
*5.92000  +XX
*6.29000  +XXXX
*6.66000  +X
*7.03000  +
*7.40000  +X
*7.77000  +XX
*8.14000  +X
*8.51000  +XXX
*8.88000  +
*9.25000  +
*9.62000  +
*9.99000  +XX
*10.3600  +X
*10.7300  +XX
*11.1000  +
*11.4700  +X
*11.8400  +X
*12.2100  +
*12.5800  +
*12.9500  +
*13.3200  +
*13.6900  +
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
               5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80
```

Delinquency Checklist, Parental Defiance.

```
                                    SYMBOL   COUNT      MEAN      ST.DEV.
                                      X        64        2.208       0.776
                              EACH SYMBOL REPRESENTS          1 OBSERVATIONS
INTERVAL
NAME          5    10   15   20   25   30   35   40   45   50   55   60   65   70   75   80
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
*0.00000 +X
*.120000 +
*.240000 +
*.360000 +
*.480000 +
*.600000 +
*.720000 +
*.840000 +
*.960000 +
*1.08000 +XXXX
*1.20000 +
*1.32000 +
*1.44000 +XXXXXXX
*1.56000 +
*1.68000 +
*1.80000 +XXXXX
*1.92000 +
*2.04000 +XXXXXXXXXXXXXXXX
*2.16000 +
*2.28000 +XXXXXXX
*2.40000 +
*2.52000 +XXXXXX
*2.64000 +
*2.76000 +XX
*2.88000 +XXX
*3.00000 +XXX
*3.12000 +
*3.24000 +XXXXX
*3.36000 +
*3.48000 +X
*3.60000 +
*3.72000 +
*3.84000 +
*3.96000 +
*4.08000 +XX
*4.20000 +
*4.32000 +
*4.44000 +X
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
               5    10   15   20   25   30   35   40   45   50   55   60   65   70   75   80
```

Delinquency Checklist, Drug Usage.

```
                                    SYMBOL   COUNT      MEAN      ST.DEV.
                                      X        64       0.949       1.151
                            EACH SYMBOL REPRESENTS          1 OBSERVATIONS
INTERVAL
NAME          5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
*0.00000  +XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
*.100000  +
*.200000  +
*.300000  +
*.400000  +
*.500000  +
*.600000  +
*.700000  +
*.800000  +
*.900000  +
*1.00000  +XXXXXXX
*1.10000  +
*1.20000  +
*1.30000  +
*1.40000  +
*1.50000  +XXXXXXX
*1.60000  +
*1.70000  +
*1.80000  +XXX
*1.90000  +
*2.00000  +XX
*2.10000  +
*2.20000  +
*2.30000  +XXXX
*2.40000  +
*2.50000  +
*2.60000  +
*2.70000  +
*2.80000  +
*2.90000  +XX
*3.00000  +X
*3.10000  +
*3.20000  +X
*3.30000  +
*3.40000  +
*3.50000  +XXXX
*3.60000  +
*3.70000  +
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
               5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80
```

Delinquency Checklist, Assaultiveness.

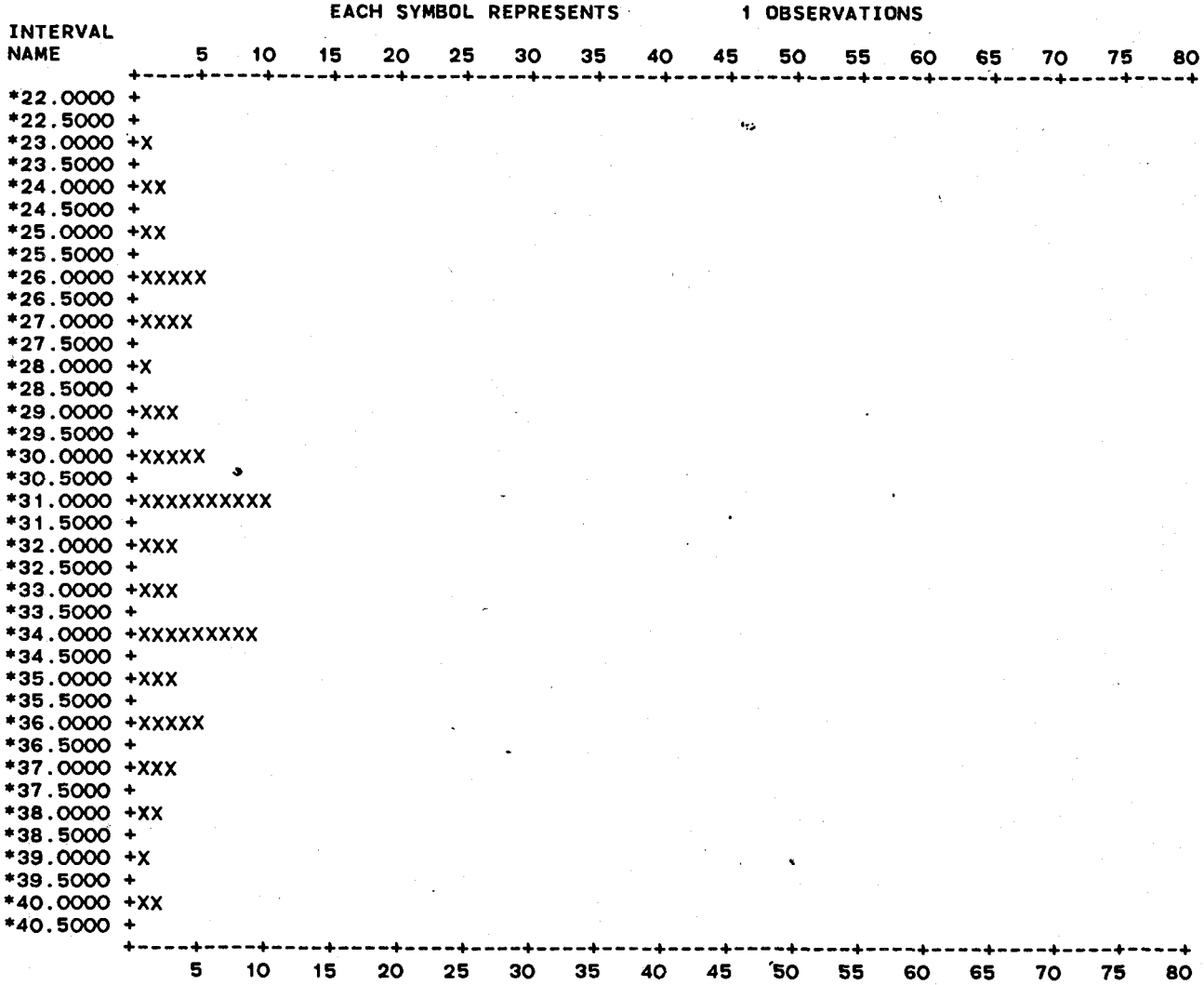
```
                                    SYMBOL  COUNT      MEAN      ST.DEV.
                                      X       64       0.404       0.708
                                EACH SYMBOL REPRESENTS          1 OBSERVATIONS
INTERVAL
NAME          5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80
             +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
*0.00000     +XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
*.075000     +
*.150000     +
*.225000     +
*.300000     +
*.375000     +
*.450000     +
*.525000     +
*.600000     +
*.675000     +
*.750000     +
*.825000     +
*.900000     +
*.975000     +
*1.05000     +XXXXXXXXX
*1.12500     +
*1.20000     +
*1.27500     +
*1.35000     +
*1.42500     +XXXXX
*1.50000     +
*1.57500     +
*1.65000     +
*1.72500     +
*1.80000     +XX
*1.87500     +
*1.95000     +
*2.02500     +X
*2.10000     +
*2.17500     +
*2.25000     +
*2.32500     +
*2.40000     +
*2.47500     +
*2.55000     +
*2.62500     +
*2.70000     +XX
*2.77500     +
             +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
                  5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80

NUMBER OF INTEGER WORDS OF STORAGE USED IN PRECEDING    PROBLEM    3848
CPU TIME USED      2.281 SECONDS
```

Rosenberg Self-Esteem Inventory, score distribution.

SYMBOL	COUNT	MEAN	ST.DEV.
X	64	31.656	4.221

EACH SYMBOL REPRESENTS 1 OBSERVATIONS



APPENDIX B: DESCRIPTIVE STATISTICS FOR EACH SCALE ITEM

		range	mean	standard deviatio
Delinquency Checklist				
1.	Gone against your parents' wishes?	0-4	1.937	0.9574
2.	Defied your parents' authority (to their face)?	0-4	1.095	0.9624
3.	Shouted at your mother or father?	0-4	1.391	1.1072
4.	Cursed at your mother or father?	0-4	0.750	0.9759
5.	Struck you mother or father?	0-4	0.281	0.8813
6.	Come to school late in the morning?	0-4	1.812	1.3555
7.	Skipped school without a legitimate excuse?	0-4	1.000	1.2215
8.	Cheated on any class test?	0-4	1.281	1.0461
9.	Caused teachers a lot of trouble by cutting up in school?	0-4	1.000	1.2600
10.	"Run Away" from home?	0-4	0.219	0.5190
11.	Driven a car without a driver's license or permit? (Do not include driver training courses.)	0-4	1.125	1.3154
12.	Been out past midnight when you were not accompanied by an adult?	0-4	2.156	1.3478
13.	Taken part in a "gang fight"?	0-4	0.484	0.9427
14.	"Beaten up" on a kid who hadn't done anything to you?	0-2	0.375	0.5774
15.	Obtained liquor by having older friends buy it for you?	0-4	1.781	1.3951
16.	Bought or drank beer, wine, or liquor? (Include drinking at home.)	1-4	1.891	1.3228
17.	Carried a phony ID card?	0-4	0.344	0.8586
18.	Drunk beer or liquor in a bar?	0-4	0.531	1.1264
19.	Player poker or shot craps for money?	0-4	0.781	1.0461
20.	Stopped someone on the street, and asked for money?	0-4	0.23437	0.77136
21.	Broken street lights or windows for the fun of it?	0-4	0.54687	0.97476
22.	Snuck into some place of entertainment (movie theatre, ball game) without paying admission?	0-4	0.76562	1.03498
23.	Killed or tortured some animal (bird, cat. dog, frog) just for fun?	0-4	0.51562	0.89073
24.	Carried a switchblade or other weapon?	0-4	0.93750	1.15298
25.	Used alcohol excessively?	0-4	0.80645	1.32861
26.	Drunk so much that you could not remember afterwards some of the things you had done?	0-4	0.75000	1.32137
27.	Sniffed "glue" or taken "bennies" for kicks?	0-3	0.20312	0.59574
28.	Gone for a ride in a car someone had stolen	0-4	0.26562	0.87726
29.	Taken little things (less than $2) that did not belong to you?	0-4	0.90625	0.97131
30.	Taken things of medium value (between $2 and $50) that did not belong to you?	0-3	0.56250	0.83333
31.	Stolen things from a car (hubcaps, etc.)?	0-4	0.45312	1.05303
32.	Bought or accepted property that you knew was stolen?	0-4	0.84375	1.08699
33.	Taken a car for a ride without the owner's permission?	0-4	0.53125	1.08333
34.	Purposely damaged or destroyed public or private property that did not belong to you?	0-3	0.62500	0.82616
35.	Had sexual intercourse with a person of the opposite sex?	0-4	1.20635	1.57765
36.	Had sexual relations with a girl who was at least two years younger than yourself?	0-4	0.25397	0.69487
37.	Exposed yourself indecently in public?	0-4	0.17460	0.63601
38.	Taken things of large value (over $50) that did not belong to you?	0-3	0.23810	0.55979
39.	Driven too fast or recklessly in an automobile?	0-4	0.67187	1.24791

40.	Snatched a woman's purse from her?	0-1	0.01563
41.	Smoked marijuana?	0-4	1.10937
42.	Hit a teacher?	0-4	0.23437
43.	Resisted arrest, or fought with an officer trying to arrest you?	0-2	0.10937
44.	Broken into a store, home, warehouse, or some other such place in order to steal something?	0-4	0.32812
45.	Had sexual relations with another male?	0-3	0.04688
46.	Sold marijuana to someone?	0-4	0.46875
47.	Been in a fight which led to a "stomping"?	0-4	0.43750
48.	Driven a car while drunk?	0-4	0.23437
49.	Taken part in any robbery?	0-2	0.23437
50.	Taken part in a robbery involving the use of physical force?	0-2	0.04687
51.	Taken part in a robbery involving the use of a weapon?	0-1	0.03125
52.	Used narcotic drugs, other than marijuana?	0-4	0.42187
	Family Satisfaction Scale		
1.	How much do you think your mother (or female guardian) likes you?	3-10	9.03175
2.	How much do you think your father (or male guardian) likes you?	0-10	8.65079
3.	Think of your favorite member of the family. How much do you think that person likes you?	1-10	9.28125
4.	How much do you like to spend time with your family?	1-10	6.57813
5.	How would you rate your own relationship with your family, overall?	1-10	7.85937
	School Satisfaction Scale		
1.	How satisfied do you feel your teachers are with your schoolwork?	1-10	6.56250
2.	How satisfied do you feel your parents (or guardians) are with your schoolwork?	0-10	6.59375
3.	How often do you get in trouble with teachers or other school personnel?*	0-10	6.81250
4.	Think of your favorite adult at school....How much do you think that person likes you?	0-10	7.24590
5.	Do you think you are doing as well as you could be in school?	0-10	4.65625
6.	How do you think your schoolwork compares with that of your classmates?	3-9	6.54688
7.	How satisfied are you with your schoolwork?	0-10	6.23437
	Grade Point Average		
1.	What is your average letter grade in school.	10-40	23.64063
	Family Closeness Scale		
1.	When you were growing up, how did you feel about how much affection you got from your father?	1-4	3.42857
2.	How often do you and your father (or male guardian) do things together that you both enjoy?	1-4	2.57812
3.	How close do you feel to your father (or male guardian)?	1-4	2.70312
4.	How much do you want to be like your father (or male guardian) when you're an adult?	1-5	3.46875
5.	When you were growing up, how did you feel about how much affection you got from your mother?	1-4	3.65625

6.	How close do you feel to your mother (or female guardian)?	1-4	3.15625	0.91233
7.	How much do you want to be like the kind of person your mother (or female guardian) is?	1-5	3.29688	1.23030
8.	How much influence do you feel you have in family decisions that affect you?	1-5	3.53968	1.02902
	How often do your parents (or guardians) do each of the following things?			
9.	Listen to your side of the argument?	1-5	3.89062	0.99390
10.	Talk over important decisions with you?	1-5	3.68254	0.93023
11.	Act fair and reasonable in what they ask of you?	2-5	3.93750	0.85217
12.	Completely ignore you after you've done something wrong?*	2-5	4.10937	0.87500
13.	Act as if they don't care about you any more?*	3-5	4.40625	0.72853
14.	Disagree with each other when it comes to raising you?*	1-5	4.03175	1.01550
15.	Actually slap you?*	1-5	4.32813	0.96040
16.	Take away your privileges (TV, movies, dates)?*	2-5	4.09524	0.89288
17.	Blame you or criticize when you don't deserve it?*	1-5	3.92187	1.04357
18.	Threaten to slap you?*	1-5	4.04762	1.22380
19.	Yell, shout or scream at you?*	1-5	3.18750	1.08196
20.	Disagree about punishing you?*	2-5	3.96774	0.90477
21.	Nag at you?*	1-5	2.79688	1.17080
	Rosenberg Self-esteem Inventory			
1.	I feel that I'm a person of worth, at least on an equal plane with others.	2-4	3.44444	0.56162
2.	I feel that I have a number of good qualities.	2-4	3.57812	0.52869
3.	All in all, I am inclined to feel that I am a failure.*	2-4	3.51563	0.56322
4.	I am able to do things as well as most other people.	2-4	3.45313	0.56145
5.	I feel I do not have much to be proud of.*	1-4	3.28125	0.76571
6.	I take a positive attitude toward myself.	2-4	3.26563	0.57022
7.	On the whole, I am satisfied with myself.	2-4	3.09524	0.68895
8.	I wish I could have more respect for myself.*	1-4	2.68254	0.89488
9.	I certainly feel useless at times.*	1-4	2.49206	0.78026
10.	At times I think I am no good at all.*	1-4	2.87302	0.95870