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LIONN DEAN KIRK

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THE DEVELOPMENT OF INVENTORY ITEMS TO MEASURE
RESPONSE DIFFERENCES OF DELINQUENT AND
NONDELINQUENT YOUTHS

by

Lionn Dean Kirk

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1977

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Lionn Dean Kirk

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Abstract

The Development of Inventory Items to Measure
Response Differences of Delinquent and
Nondelinquent Youths

by

Lionn Dean Kirk, Doctor of Philosophy

Utah State University, 1977

Major Professor: Dr. David Stone
Department: Psychology

This study was designed to refine and validate a 160-item self-report instrument which drew its items from personality theories and from clinical practice related to delinquency. The aim was to estimate the usefulness of items descriptive of delinquent behavior by testing their reliability and discriminative power.

There were two objectives. First: to test a set of items for their power to discriminate delinquent from non-delinquent responses which referred to delinquent and nondelinquent behavior. Second, to validate the power of the selected set of items to discriminate delinquent from non-delinquent youths in a second mixed group. Both objectives were realized in that significantly discriminating items emerged, which when administered to a second group, correctly classified 80% of the tested youths.

The subjects in this study were youths who were selected as delinquents (n = 125) and nondelinquents (N = 125). The items used in the measuring instrument were collected over a period of several years and based on theoretical and clinical resources. Selected items referred to family togetherness, family supportiveness, limit-setting and behavior consequences, self-esteem and success, and school functioning.

The results of the study provide a set of items which may be administered to help describe dissocial behavior. The items may be used to educate parents, other adults, and students in recognizing some psycho-social behaviors related to interpersonal social behavior.

(116 pages)

Introduction

Problem

Adults and children often experience communication problems when trying to resolve perceived differences in attitudes, beliefs, or values. Childrens' observations of parent behavior often differ from the behavior which parents lead their children to expect. When disparity occurs between a child's expectation of how the family should communicate and what is actually experienced, it may produce frustration and lead to acting-out behaviors (Jackson, 1968; Satir, 1972; Parsons, 1972; Trojanowicz, 1973; Watzlawick, Weakland & Fisch, 1974; Skynner, 1976).

Both in the literature and observations of parent-child behavior in the clinical setting, many problems reportedly occur in family communications (Gibb, 1961; Tharp & Wetzel, 1969; Laing, 1970; Alexander, 1973). Parents often impose certain ideals (values) upon their children to control unwanted behaviors, but consequently parents often fail to model these same ideals. Thus, a need exists to evaluate the childrens' responses to the incongruity of models, and to their interaction with them, particularly parents, in order to ameliorate or prevent dys-social behaviors from occurring.

Identifying predelinquent youths by means of an objective assessment may help to meet the following needs: (1) giving information about how the youth perceives self, family system, and other social systems (Cortes & Gatti, 1972; Trojanowicz, 1973; Papajohn & Spiegel, 1974; Skynner, 1976), (2) giving information which describes potentially serious behaviors (Coleman, 1972; Brantingham & Faust, 1976), and (3) giving information about behaviors to observe for prevention program goal-setting (Gibbons, 1970; Gibbons, Lebowitz, & Blake, 1976). A technique is needed for earlier identification of youths with avoidance behaviors toward adults who try to set limits for them, particularly youths who later emit serious behavior disorders. Assessing youths' problem behavior at the preadolescent stage may help to eliminate seriously disruptive behavior.

Unfortunately, youths in nonsupportive environments often find themselves alienated and stigmatized with less social, academic, personal and vocational choice than meets their needs. It is not unusual for parents, or other adults, to recognize that dyssocial behaviors are developing in a child which may stigmatize him, but adult reactions to the problem are often to ignore the symptoms until the behavior can be tolerated no longer. The community must then take action (Trojanowicz, 1973; Utah Juvenile Courts, 1970; Coffey, 1975; Finestone, 1976). A tremendous increase in the number of delinquent youths has been noticed in the past 30 years (Aichhorn, 1953; Arieti, 1966; Coleman,

1972; Uniform Crime Reports, 1975; Lundman, McFarlane & Scarpitti, 1976). Reports for offenses of incorribility, truancy, runaway, and more serious crimes of younger children continue to increase. Increased needs to understand youths' problems make it necessary to operationally define behavior rather than to just identify it.

The literature continues to emphasize a need to increase knowledge and techniques for assessing cause-and-effect relationships of youth behavior development and consequences (Cressey & Ward, 1969; Gibbons, 1970; Shore, 1971; Caplan & Nelson, 1973; Finestone, 1976). While no final answers have appeared, behavioral scientists have at least continued to report numerous theoretical developments, designs and methodologies for studying delinquency problems and prevention (Goldenberg, 1973; Mussen, Conger & Kagan, 1974; Trione, 1975, Bell, 1975).

Inappropriate labeling is a distractor to careful behavioral description (Hunter, 1974; Coffey, 1975). Counselors, parents, officers of the law, courts, and numerous adults continue to overuse such exaggerated labels as hyperkinetic, minimal brain damaged, predelinquent, and criminal (Gross & Wilson, 1974; Schrag & Divoky, 1975; Wender, 1971; Ross & Ross, 1976).

The labeling problem is further complicated since legal records of youth offenses are available, even though they are supposed to be "sealed." Thus a youth with legal record can be subjected to rather

permanent stigma (Goffman, 1963; Hart, 1974). A youth's incentive to retain a nondelinquent status is reduced rapidly when one or more of such stigmatizing labels is attached to his records (Coffey, 1975). A system of assessment which uses labels that are less destructive could help ease the problem, particularly with younger children.

The literature reported only limited success in the process of identifying main contributing factors of delinquency (Buros, 1972; Trojanowicz, 1973; Berlin, 1975). Prevention techniques have often been reported as too complex for use in most treatment programs. As an example, the Glueck Prediction Table (Glueck & Glueck, 1950) required many years of training before competency was achieved to administer it, thus greatly limiting its use.

Theoretical constructs, useful in examining the response characteristics of delinquency-prone youths, have long been available (Hathaway & Monchesi, 1953; Quay & Peterson, 1958; Sutherland & Cressey, 1966; Glueck & Glueck, 1950; Kvarsceus, 1959; Porteus, 1959; Jesness 1963; Gough, 1964; Cottle, 1972; Finestone, 1976). However, limited clinical use has been made because these collections lack tested reliability, validity, or applicability (Buros, 1972; Trojanowicz, 1973; Gibbons & Jones, 1975). For example, many characteristic youth behaviors occur in both delinquents and in nondelinquents (Glueck & Glueck, 1950, 1974; Ferguson, Partyka, & Lester, 1974).

Design of the Study

Purpose. The purpose of this study was to test a set of items which had been collected to demonstrate behaviors where the responses of delinquents might be expected to differ from those of non-delinquent youths.

Objectives.

1. To test a set of behavioral items for their power to discriminate delinquent from non-delinquent responses.
2. To validate the power of the selected set of items to correctly classify youths in a mixed delinquent, non-delinquent group.

Procedure. The steps leading to, and used in this study are listed below:

1. To establish from the literature the seriousness of prevalence of a need for improved techniques with which to operationally define delinquency.
2. To develop a set of theoretical constructs from the literature to be used in collecting items describing delinquency.
3. To use clinical case records from social service and legal service agencies to develop items describing patterns of dyssocial behavior.
4. To select items representing a wide range of behaviors related to self, family, and community functioning.

5. To evaluate the selected items for their power to discriminate between delinquent and non-delinquent responses (Phase I).

6. To use the items generated from the Phase I process to cross-validate on a new mixed delinquent and non-delinquent sample (Phase II).

Delimitations of the Study.

1. This is a unique set of items. Although the general content of this type of item has appeared in the literature and has been used in treatment centers in dialogue by therapists and other treatment specialists this collection of items has not appeared elsewhere in its entirety.

2. Attempts to statistically measure the discriminating power of testable items are rare, so that comparisons to available measures are limited.

3. Procurement of subjects for the completion of the study required the cooperation of several institutional administrators, and was difficult because of recent legal sensitivities.

4. Since only certain institutions are available, the study is limited by the admission policies for generalizability of results.

5. The subjects were not further subgrouped for physical characteristics, cultural background, personality traits, sex, age, or other demographic information.

6. The question "When is a youth really a delinquent?" can be answered in a variety of ways, but Table 1 was used to clarify the ratings for specific behaviors.

Table 1

Variations of Intensity Observed in Youths from
Behaviors Within the Sociocultural System*

1. Has positive perceptions of self, behaviors and environments. Situational variables are positive with a favorable prognosis. Little difficulty in problem-solving or decision-making activity.
2. Has positive perceptions of self, behaviors, and environments. Has less than optimal situational pressures, so some negative feedback. Has a social, problem-solving, or decision-making handicap or limitation.
3. Has conflicting perceptions of self, behaviors, and environments. Has a severe situational problem since dyssocial modeling in home or the community hampers optimal social roles. Has successfully buried emotions.
4. Shows identifiable predelinquent behavior (dyssocial). Environment and situational variables vary from bad to good. Broke laws, not arrested.
5. Commits status offenses regularly, apprehended, but not arrested. May increase seriousness of offence or threaten well-being of self or of others. Opposes establishment and social-cultural system. Also no. 3 and no. 4 negative attitudes apply.
6. Has been arrested for status offense, but usually cooperative with the officers. May have experienced some counseling or was referred to a diversion program for rehabilitation. Usually negative about family members, even though the parent shows support or even overprotectiveness. Has internalized a negative social role. May not go to court if incarceration and counseling seem to produce favorable results. Insulated emotions allow youth to be manipulative.
7. Was arrested and incarcerated for serious offense. Was mildly cooperative but was reported as unmanageable. Often asserts a very negative attitude toward others, and sometimes self. Seems to lack a feedback system that is sensitive to others, or to appropriate behavior thus reports that school police or other authority are unfair. Has been self-alienated or adult-alienated from positive modeling practices from appropriate social models, thus seeking identity or authenticity from those who accept or tolerate him.

Table 1 (Continued)

-
8. Was arrested for criminal acts. Higher risk than no. 7 and with moderate severity of offense. Has unpredictable, irregular offense history with cognitive, affective, volitive patterns observed as irregular. Negative relationships with most family members or those who are not susceptible to domination or victimization. Has other characteristics of no. 3 and no. 7. Implications of suicide when depressed.
 9. Shows no. 8 behaviors, but recidivism risk high with high severity of criminal acts. Regular arrest record indicating deficit of self-control or discipline toward socially acceptable behavior. Impulsive behavior with alcohol, drugs, sex, auto vehicles and expendable items. Seeks people and "things" to buffer reality, manipulating environment to feed his needs. Often demonstrates a bi-polar mood disorder, especially when losing control of emotions. Maintains blamelessness.
 10. Youth exhibits no. 9 behaviors with most severe offense rating. The prognosis for rehabilitation is for rehabilitation is extremely guarded. Offensive and bizarre behaviors from a continuously operating mental and emotional stress. May have extreme fluctuations in mood and when in a "low" depression does not associate with others. Usually seeks drugs or alcohol to ease the stress of living, occasionally being the victim of an unintentional suicide. Often classified as psychotic personality or reaction to intrapsychic dynamics. Sometimes classified also as sociopath (or even schizopath). Real feelings are exhibited mostly when they geysers and youth loses control.
-

* The first five ratings are classified as nondelinquent levels from which youths were selected as nondelinquents.

** The last five ratings are classified as delinquent levels (No. 's 1 through 7 are on preceding page).

Descriptive Terms. This study contained several alternative terms for delinquency or delinquent behavior, some of which can be seen in Table 1. These terms are used to describe the degree of seriousness of unsocial behavior. The term dyssocial describes behavior which failed to be approved socially as appropriate (Aichhorn, 1953; Arieti, 1966; Coleman, 1972). Intense-dyssocial behavior describes unlawful activities which could result in incarceration or adjudication, while criminal-dyssocial behavior refers to the most serious criminal offense by youths. The phrase, "maladaptive behavior," is used occasionally to describe delinquent behavior in a very general way, along with other terms as antisocial, aggressive, or rebellious. The writer prefers and generally uses the term dyssocial. The variety of terms used to describe aberrant or dyssocial behavior in the literature varies from such terms which describe status offenses (or minor offenses, which, if committed by an adult would not become offenses) to terms which describe the criminally insane offenders.

The classification of delinquent and nondelinquent groups in this study is primarily based on Table 1 terms to avoid ambiguity, because writers in the general area of behavioral offenses and disorders often develop a style of writing which reflects a certain background, education, disciplinary orientation and personal preference.

In this paper, the term "dyssocial" describes an "impaired function" as in these sources in which it is used (Arieti, 1967; Aichhorn, 1953; Coleman, 1972; Trojanowicz, 1973). Using this term (dyssocial)

tends to avoid the inferences which more stigmatizing labels such as criminal or delinquent impose.

Review of Literature

Introduction

Despite extensive investigations, literature in the field of delinquency remains conflicting and confusing. Educators continue to stress that socialization is faulty (Gross & Wilson, 1973). Behavioral scientists postulate that environmental conditions cause behavioral problems (Franks, 1975; Skinner, 1971; Cressey & Ward, 1969; Patterson, 1971, 1976; Sutherland & Cressy, 1966). Neurologists emphasize chemical and anatomical deviations of the organism as a cause of behavioral deviations (Gross & Wilson, 1973). There is a trend for clinicians and medical practitioners to use medication as a primary control agent, thus attempting to provide some alleviation of dyssocial behavior.

The best law enforcement agencies promote prevention as well as stressing techniques for improved organization, surveillance, and detection more than for prevention. Some authorities in the judicial system have suggested more effective counseling for youths, children and families and have supported improved psychotherapy treatment (Rubin, 1972; Gardiner, 1976). The fact remains however, that so little is done before the youth falls into dyssocial behavior patterns

that some parents say "Somebody do something. Somebody do something before it's too late" (Price, 1977, page 345).

Unsolved Problems Requiring Further Studies

Buros (1972) found few instruments designed to measure youths' attitudes of delinquency proneness. Of those listed in the yearbook, no test provided convincing validity and reliability data (Buros, 1972). Spiegel urged that methods be developed to describe variations in delinquency-oriented subsystems, and indicated that the most important social-cultural subsystems were the individual (youth), the family (youth, sibs, parents), and the cultural systems (Spiegel, 1971). Recommendations were also made that the transactions in families provide a most fertile ground to establish behavior patterns (Papajohn & Spiegel, 1974; Newman, 1976; Skynner, 1976).

Family system problems in setting limits. Parents are often inconsistent in defining and keeping the limits which they establish for their children. Behavioral and operational defined procedures and controls have enhanced communication and often simplified disciplinary procedures (Krumboltz & Krumboltz, 1973), but youths have often spoken disparagingly of the results of limits-setting when limits were not kept or there was little open parental negotiation (Dreikurs, 1964; Patterson, 1976).

Control of behavior has proven inadequate when "discipline by guilt" and "extra punitive" controls were used. Guilt, as a control

technique, was described as causing irreparable damage when the child fails to adapt to either success or failure, particularly if the guilt or shame continued into adolescence. Clinically, it has been established that when it was used for control, guilt or shame reduced the ability of children to develop inner controls, or self-discipline (Aronfreed & Reber, 1968; Lewis, 1970). Children have been able to reciprocate and use guilt and punitiveness on parents (Bandura, 1973). Parents who became aware of the negative consequence of control by guilt often changed to a more compatible adult-child interaction, instead of power conflicts and a symmetrical escalation (Watzlawick, Beavin, & Jackson; Satir, 1964, 1972).

Physical or verbal harshness (abuse) is also a form of control by punishment. Verbal threats and insults typically evolve into physical aggression (Ribes-Inesta & Bandura, 1976), while Toch (1969) reports that threats to reputation and manly status emerge as major causes of violence, it also influences children to model parents. Not only is the behavior modeled, but increases as proportional to the parents aggressive behavior (Bandura & Walters, 1963; Bandura, 1968). The failure of the child to internalize controls which lead to satisfying social roles is the most serious consequence of parental abuse by adults. Parents may save a little time at first by using verbal abuse and violence, but the end result takes time and many parents experience remorse (Aronfreed & Reber, 1968). Other consequences of this abusive behavior

reportedly lead to increased hostility, cruelty, misanthropy, and withdrawal symptoms (Bandura & Walters, 1963) or other suffering by inhibitory behaviors (Ribes-Inesta & Bandura, 1976).

Adult-child interpersonal problem areas. The angry parent syndrome occurs when unwanted behaviors of a child elicits spontaneous (explosive) reactions from parents or other adults. Intense reaction to child behaviors reinforce the unwanted behaviors. There is no difference whether the behavior is good or bad, for it does increase (Smith, 1968; Patterson, 1976; Gordon, 1970).

Even though techniques are often used effectively to train adults to increase desirable behaviors of children, it often requires a "change-agent" to help facilitate a plan of action (Tharp & Wetzel, 1969; Cohen & Filipczak, 1971; Patterson, 1970, 1976). As the status of the adult declines by reason of losing control when displaying irrational behaviors, some detrimental effects are observed in the child (Smith, 1968). Although it has been traditionally ideal for adults to have absolute control over children's behavior the Glueck & Glueck studies (1974) indicate that it is detrimental to self-control, in addition to inhibiting communication. Regimental obedience produces little opportunity for the developing child to make independent or appropriate decisions. Additionally, when youths do not have the occasion to think independently because of maternal overprotection, the interdependency can often become pathological, especially between mothers and sons thereby emitting symptoms of symbiosis (Mahler, 1968).

Parent task/child tasks for optimal communication. In order for communication to develop optimally between parent and child, a certain responsibility for both must be identified. If the parent passively assumes that the child is growing up in a well-balanced positively communicative environment, the parent may assume little responsibility or effort to adequately reinforce appropriate behavior in the child. However, the prime responsibilities for shaping behaviors in children belongs to the parents. It is much more effective and efficient for parents to elicit the assistance of their children to establish contracts or compromises, than to try to be either dictatorial or passive (Glueck & Glueck, 1950, 1972, 1974; Smith, 1968; Satir, 1964, 1972; Beier & Valens, 1975). A question that may be asked often is, "How can I know what is really going on in my family?" This usually refers to how serious is the effect of a child's behavior at school or home.

Gibbons suggests that a simple instrument is needed to assess the seriousness of a child's behavior during preadolescence and adolescence. The instrument would ideally convey no excessive guilt, bias, or incongruent messages (Gibbons, 1970), but would scientifically evaluate behavior in order to assess temporal changes in behavior (Gibbons & Jones, 1975). If the parent does not take responsibility for evaluating a child's behavior, then the community has the responsibility if the child becomes dyssocial. Federal programs have been attempted to assess all children for abnormal behaviors (Schrag & Divoky, 1975).

Many other parent roles emerge, but none so critical as assessing child behaviors periodically for seriousness of maladaptive behavior.

Parent and child roles for improving the child's positive self-concept are often misunderstood or neglected (Wylie, 1960, 1975), but if properly understood by child and parent, improving the self-concept enhances both the position of the parent & child (reciprocally) (Patterson, 1975).

Additional research is providing new methods to improve self-concept by integrating resources of the community toward generating youth roles that enhance socially satisfying and appropriate behavior (Annual Report, 1972; Hunter, 1973; Berlin, 1975; Coffey, 1975).

Although the parent becomes the star player in this stage of survival, the child must participate in the efforts of parents, and others, if a positive social role for youth develops.

Social system contributions to delinquency. One of the main problems in the development of a child's adaptive behavior has occurred because of an indoctrination of failure in the child's setting. Research in assessment of reasons for incarceration by Walker described all youthful offenders in the study as having academic deficits (learning disabilities, emotional disturbance, and other disorders) (N = 401). Few of the violators reported a parent advocate who would assist in supporting their academic success or become involved in community programs unless it was a legal requirement (Walker, 1973). The contemporary social order has demonstrated a reluctance for change

oriented planning which should have integrated more new methodologies for prevention and control of crimes or dyssocial behaviors. Since failure has been modeled by the cultural system, it provides a laissez-faire model for the family system to follow (Nisbett, 1968).

Variables in delinquency causation. The review of literature on juvenile delinquency indicated that a wide selection of theoretical causes for dyssocial and criminal behavior existed (Trojanowicz, 1973; Coffey, 1976; Rubin, 1977). The reported findings were productive in developing useful models to actively control delinquent behavior. Theoretical constructs did not identify specific causes, precipitating factors, and prevention techniques to control delinquency. Little useful data appeared to describe or generalize knowledge of how situational events precipitated delinquent behavior during a child's development. Overall, there was an impressive lack of certainty about the origins of dyssocial or criminal behaviors. Descriptive terms tended to become confusing because of inferences such as precipitating factors, yet the term varied rather than clarified whether occurrences were situational, cumulative, or intrapsychically influenced. Other terms were more evasive as, "explanations of social-psychological processes by which the individual comes to exhibit the behavior or epidemiology in question," or again, "...there should be an explanation of statistical distributions of behavior in terms of time, space, and social location" (Cressey & Ward, 1969, p. 244). Mussen, et al., described delinquency causes as

"...major antecedents of delinquency" (Mussen, et al., 1973, p. 3). The words sound quite authentic, but were less than useful for identifying causation.

Descriptively, the term causation inferred that there was an all-or-none connotation, such that priority of theories was based on high or low correlation in predicting delinquency. Most techniques have not correlated high enough with concurrent or predicted delinquency to identify "true" causal factors. Since no really high correlations (as $\pm .80$ to ± 1.00) have been reported, researchers consistently fail to assert specific theories of causation. Occasionally, contemporary writers have used the term causation liberally, but usually presented all major causation theories (Trojanowicz, 1973; Coffey, 1976). Trojanowicz and Coffey presented entire chapters on physiological, psychological and sociological causes of delinquency, but presented only a general emphasis on how environmental factors were useful to develop an identification or prediction technique.

Summary of Theories

No single statement could possibly cover all of the theories that are conceivably true. Correspondingly, the diversity of valid knowledge is great enough that no theory, or builder of theories, could embrace all of it (Allport, 1968). The survey of psychological theories in this chapter is based on the following premises:

1. The use of theories helps to organize the data.
2. The use of theories help to set direction for further heuristic studies.
3. The use of theories suggest comprehensive intervention program planning.

Delinquency has become a socially defined phenomenon that closely related to cultural values. Description and treatment are dependent upon the interpretation given by the discipline which was responsible for handling a delinquency case at a given time (Shore, 1971).

The factors of delinquency causation were synthesized into a five-dimension categorization by Moles, Lippitt & Withey (1959). These authors attempted to integrate explanations of dyssocial behavior, by using the disciplines of anthropology, sociology, economics, education, psychology, psychiatry, law, and the justice system. The results of integrating theories from these five dimensions are useful in organizing explicit delinquency theories when the psychological-sociological approach is less than optimally useful. An outline of the dimensions is found in Table 2.

After exploring interdisciplinary explanations of dyssocial youth behavior, delinquency control, and prevention, the most comprehensive approach was found to be by persons who embraced a general systems theory approach. Family systems theory, as it primarily originate from general systems theory, was clarified in part by several

Table 2
Five Levels of Variables for Delinquency to Occur

Types of Variables						
Independent and Intervening Variables					Dependent variable	
1.	Macro-cultural & Macro-social	-----*	-----*	-----*	-----*	Dyssocial, Intense-Dyssocial, or Delinquent Act
2.	Macro-temporal		-----*	-----*	-----*	"
3.			Inter-personal	-----*	-----*	"
4.				Intra- psychic	-----*	"
5.					Situa- tional	"

*Intervening conditions which must be specified with a complete causal statement.

authors (Parsons, 1954; Miller, 1955; Bertalanffy, 1968; Spiegel, 1971; Buckley, 1968; Spiegel, 1968; Wheeler, 1972; Blocker, Dustin & Dugan, 1972; Parsons, 1972; Alexander, 1973; Alexander & Barton, 1976; Skynner, 1976). The constructs of family systems theory can partially explain behavior dynamics in each of the five dimensions of the framework provided by Moles, et al. (1959).

In this chapter, only a few of the 25 theories with a psychological base (Shore, 1971) are integrated into the framework of Moles, et al., (1959). These theories simplify theoretical classification. Basically, the Spiegel (1971) approach was used to examine the individual, family, and social system functions and how they "reverberate together" to form a comprehensive explanation of behavior (Spiegel, 1971, p. 1).

The Impact of the Family System on Child Behavior

"How can my child be controlled to allow me to survive?" and "How can I help my child learn, and yet allow creativeness and hopefully independence?" These are important questions which both parents and other members of society ask themselves. Since these questions continue to arise, apparently few answers are acceptable and most answers are welcomed (Federal Report, 1972; Gardiner, 1976).

Reviews of family systems theory emphasized factors other than situational, hereditary, or family incompatibility as contributing factors to delinquency. Neglect and poverty were also considered (Howells,

1972). Larger social systems have contributed resources to prevent youths from behaving dyssocially. However, school and community institutions should provide more educational and recreational programs in needy areas. This should have helped to prevent a deficit in the development of positive self images and increased satisfactory social roles (Berlin, 1975; Kenniston, 1975). Another factor, racism, has contributed to higher crime rates and fewer prevention programs, and has continued to grow worse in many sectors (Kenniston, 1975) yet has not been controlled well at the family level. The explosiveness of these issues has not ameliorated, and with deficits of appropriate models, little leadership for appropriate change was predicted (Nisbett, 1968, 1972).

Even though the family may be passed over lightly or ignored as the primary unit for initiating positive change in children, few can deny its integral involvement. Within the family system, control and prevention, or even the treatment of delinquent behavior does provide an influence (control) which allows the child to learn "appropriate" and adaptive behaviors (Whyte, 1961). In the family system, the child may try new roles and can ethically generate self-esteem to confirm self-identity and authenticity (Buber, 1958). Other environments provide more structure, but the most formative periods of learning are in the home, which also provides an extended time period where the child learns. The family system has the optimum and maximum control of

the child's learning behavior (Mussen, et al., 1973; Bell, 1975).

There were reports, however, that parents were helpless to control a child's behavior, particularly when the child became an adolescent before parents initiated some control procedures (Homan, 1969; Dobson, 1972; Miller, 1958).

When researchers explore the trend of youths to revolt against conventional values, a 150 year history is revealed in which rebellions occur (Esler, 1971). Rebelliousness has its roots in the deficit of congruent behavior that parents display, between what they say and do. It increases when parents demand idealistic behavior from youths but seem to fail to display this idealistic behavior (Yankelovich, 1969, 1971; Esler, 1971; Glasser, 1973). Adults exhibit a variety of attitudes toward their children from generation to generation which require adjustment to the various control techniques used by parents (Plumb, 1972).

Historically, the sociocultural system in England dictated that children should be treated differently than adults. This meant that they dressed differently, ate separately, and became distinctive in many ways. In all of this children survive extremes of parental expectations (Plumb, 1972). Social rules are still confusing for children, particularly when a balance among love, discipline and independence is not established (Homan, 1969; Dobson, 1972; Gattegno, 1971).

Often, children are more successful in their drive toward more independence in decision-making, but lack discipline to allow for

responsible consequences (Esler, 1971; Gattegno, 1971; Trojanowicz, 1973; Kenniston, 1975). Many parents indicate a preference for control or prevention of dyssocial behavior which follows a traditional strategy of having a strong masculine regime in a home to control unwanted behaviors, but now the father became too busy--or disappeared entirely. The community organizations take much of the responsibility for imposing controls on wayward youths (Aichhorn, 1963). Now, community agencies and systems have worked with problem children, contracting with the child to improve his or her behavior in the school and to gain a more positive self role (Tharp & Wetzel, 1969; Trojanowicz, 1973; Patterson, 1976). These structured attempts for working with problem children are necessary because of rapidly changing expectations in the social system (Offer & Offer, 1975). If parents expect nonfamily organizations to be responsible for their child's behavior, these organizations may need more support and/or license to help the child to make decisions (Keniston, 1975).

Research and the family system. Traditionally, the literature described successions of generations which exhibited delinquent behavior, particularly when sociopathic deviations were evident, whether by genetic or generic causation (Teeters & Rhineman, 1950; Trojanowicz, 1973). Until recently, the upper social class phenomenon was one which was excluded when sociopathic or dyssocial behavior was studied. However, delinquency is not a single level class phenomenon in social-cultural communities today (Empy, 1972; Coffey, 1976).

In family systems research reports, the types of messages that are sent and received are examined for content which contributes to pathological behavior which may occur in any social level. Various types of message content are such as: positive, negative, defensive, supportive, temporal and sequential communications (Winter & Ferreira, 1969; Alexander & Parsons, 1973). Incongruent messages often identified when family sessions occur (Satir, 1964, 1972; Laing, 1970; Parsons, 1972; Alexander, 1973). Increasingly, of family interaction research is recorded by observational research methods (Riskin & Faunce, 1972; Alexander & Barton, 1976).

Positive results are reported from studies using theoretical constructs of the family system when social learning (Alexander, 1973; Alexander & Barton, 1976; Patterson, 1976; Parsons, 1972) or observation and decision bases are used (Haley, 1963; Watzlawick, Wealkand & Fisch, 1974). Most operations based on these approaches are related to a family systems approach evolving over a period of 20 years (Boulding, 1956; Bertalanffy, 1968; Riskin & Faunce, 1972; Watzlawick, et al., 1967; Buckley, 1968; Skynner, 1976).

The family systems approach is comprehensive in its nature, and it maintains few restrictions for utilizing multi-disciplinary information (Cortes & Gatti, 1972), multi-factoral (Cattell, 1973), or multi-valent (Gattegno, 1971) information. A summarization by the Gluecks helps to describe a multi-disciplinary method:

"It became clear that such an inquiry should be designed to reveal meaningful integrations of diverse data from several areas and levels of investigation. There was need for systematic approaches that would not ignore any promising leads to crimino-genesis, covering as many fields and utilizing as many of the most reliable and relevant techniques of investigation as are necessary for a fair sampling of various aspects of an exceeding complex biosocial problem. (Glueck & Glueck, 1974, p. 18).

Investigations, treatment modes, or prevention constructs apparently lacked success in applying macrocosmic principles to delinquency control and prevention. The crime rate and number of youths who become involved in criminal justice systems increase (Lundman, McFarlane & Scarpitti, 1976).

Review of Measurement Methods

Introduction. In general, the literature provides few highly relevant findings on measuring the relationship between the impact of social-cultural systems and the development of behavior in youths. When prevention or control of dyssocial behavior is the issue, it becomes "...the most overworked and least understood concept in modern criminology." The quantitative statistical significance increases when, "It has been estimated that, since 1965, alone, over 6,500 programs have attempted to provide delinquency prevention" (Lundman, et al., 1976, p. 298). Some studies are oriented toward the self or individual system (Allport, 1968; Spiegel, 1971; Wheeler, 1972). Other investigations are oriented toward the interactions and interpersonal dynamics (Sullivan, 1953; Haley, 1963; Buckley, 1968; Alexander,

1973, 1975; Glueck & Glueck, 1974; Skynner, 1976). Finally, the systems of diagnosis, assessment, evaluation and analysis are integrated into the purpose of this study by using the transactional system (Spiegel, 1971; Papajohn & Spiegel, 1974, Skynner, 1976). Just by making this integration attempt, it was apparent that a fruitful search for causes of dyssocial behaviors required many theories approaches and several theoretical frameworks to develop a useful methodology for behavior assessment.

Methods which were surveyed, compared, and utilized in developing items for this study included the following categories: (1) case history, (2) psychological testing (including projectives), (3) observation, (4) interviewing, (5) psychotherapeutic observation, (6) attitude and rating scales, questionnaires, and (7) self-report devices.

Case history. Case history approaches often investigate individual's who are in clinical groups, "...seeking to find significant events or patterns of behavior which can be said to be characteristic of the group in question..." (Rabkin, 1965, p. 105). In institutions with large patient populations, researchers have seen this method as advantageous because the material for compiling a case history was readily available. It can be written by someone technically oriented but not necessarily a psychologist or psychiatrist.

This method was purported to avoid the pitfall of using subjective clinical impressions which might have been unreliable. However,

difficulties in maintaining objectivity are a threat, even with this method (Rabkin, 1965). Compiling events contributing to the etiology of a patient's condition implies some selection, and personal biases can occur. Most subject to question is reliability, because sources of data are usually from an informant, and little effort can be made to validate or cross-check this data. Finally, if control groups were chosen, they are not useful for generating baseline data apart from an experimental variable. Also, the reliability of subtle behaviors across groups is low (Rabkin, 1965).

Psychological testing (including projectives). Psychodiagnostic studies have used tests that might unearth patterns of family behavior or personality characteristics of family members (or using projectives), as Rabkin (1965) noted. Those measures sought to assess personality traits or the "typical behavior of people in daily life e.g., typical gregariousness or hostility," etc. (Nunnally, 1967, p. 472). Typical behavior was to be measured when possible, but even "typical" behavior can be interpreted differently (Nunnally, 1967). The types of measurement techniques available depend on the personality trait which was studied. Howells and Lickorish (1963) hypothesized that a child's behavior was largely determined by his relationships with parents. Those researchers sought to assess the child's general relationship with the family. A constricted response type of projective technique was based on gaining associative responses to a series of pictures which allowed a wide latitude of verbal responses. This approach made objective

conclusions difficult (Rabkin, 1965). The bits of data were supposedly representative of the child's attitudes toward his family or the nature of his family relationships, were selected from among the total responses for statistical manipulation. Relationships between elicited material and any sort of "real" behavior was not demonstrable. Interpretation of data from psycho-diagnostic instruments suffers from interpreter bias due to the very nature of indirect measurement (Rabkin, 1965). Furthermore, the interpreter bias often locks the family members into a pathological perspective, overlooking healthy family functions. With this method, there was difficulty in establishing adequate control groups and so lessened the effective research value of those studies (Rabkin, 1965).

Observations. In most observational methods, the validity of the measurement is completely dependent on rater reliability. When judgments were made from observation about the personality traits of other people they are accurate only if the observations reflect the categorized behavior (Nunnally, 1967). Descriptions in these observational methods are highly subjective and judgments are often made through the intuitive processes of the observer. Most observational methods only required that the observer record what the subject(s) actually did; others required a low level of inference only. Nunnally (1967, p. 486) states that typically, "the more objective the behavior to be observed, the more molecular the trait involved."

Barton (1973) describes systematic approach as a means of controlling the observed interaction in pairs (dyads). A kind of control for interaction was provided by selective reinforcement. In some studies, baseline communication behaviors are programmed onto the families by observers, rather than by taking normal observational measures (Patterson, 1968). Since the content and frequency of interactions is subject to change due to the observer effect, it is necessary to formulate a subjective list of behaviors to standardize observer behavior. The disadvantages to this type of research is in relying on one, rather than on a variety of variables (family research subjective observations).

Interviewing. Nunnally (1967) described the interview as simply one type of observational situation. However, it was seldom used for observing personality traits in general. The interview was frequently used for assessing an individual in order to make a decision about him, e.g., as a job interview or psychiatric session. Usually, the interviewer had neither met the individual before, nor had known much about him. Interviews generally took less than an hour. Because of the time limitations, Nunnally stated that interviews make sense only "if it can be assumed that (1) the interviewer is particularly talented at observing some important traits, and (2) the interview is limited to obtaining information about only a small number of traits" (Nunnally, 1967, p. 489).

Nunnally further stated that it was surprising that people who often castigated the standardized tests, place inordinate faith in what could be obtained in a 30-minute interview. Furthermore he stated that, "it is clear that the interview does not provide a valid general tool for the measurement of personality traits" (Nunnally, 1967, p. 489). As Rabkin stated, many of the problems inherent to case studies were common to the interview method with additional limitations of data being colored by social desirability factors, blocking, selective recall, denial, and others. External reports of patients were highly subject to biases in their accounts. A "self-selection" factor was evident because interview samples differed, especially when the interviewer was a volunteer, or the patient was a volunteer. Differences across social class and ethnic groups in seeking treatment added to this "self-selection" bias rather significantly (Rabkin, 1965).

Psychotherapeutic observation. Attempts to systematize and empirically validate treatment approaches that used observation for parental retraining provided information with which to assess the method (Martin, 1967; Parsons, 1972). Tharp & Wetzel (1969) conducted a study to determine the effectiveness of training a parent as behavior modification facilitator in the home. That study was specifically designed to improve on several traditional techniques. The need for improvement was identified in the following areas:

1. A child's behavior was seldom observed by a therapist; the parent had to make the description.

2. The behavior of parent toward child was rarely observed.
3. Problems arose in translating suggestions by therapist as too general or too technical for parents to understand them.
4. It was difficult to judge progress, or treatment effect without objective records for behavior change over intervals.
5. Attempts to surmount those limitations were mostly improved by using observers to measure interaction, record behavior (parent and child), and measure behavior change and therapeutic effects. Thus, the use of observers was hypothesized to transcend the limitations of traditional therapy, and compile effective assessments of pertinent phenomena (Thorpe & Wetzell, 1969).

Disadvantages to this method were in the observer effect (Patterson, 1970; Helmstadter, 1971). Pragmatic necessities for training and validating observer skills compound the training of experimenters. If multiple observers used to increase observer reliability, more variability is introduced. This method of study is also criticized on the basis of having a specialized treatment setting (Rabkin, 1965), which affects the use of control groups. Another criticism of parent retraining as a treatment approach is the failure to deal with the entire system on an equitable basis. Even though it was part of the design, it did not alter the conditions in family, school, or community systems (Parsons, 1972).

Attitude and rating scales. Family research studies which used attitude scales, rating scales and questionnaires attempted (usually) to elicit attitudes of parents toward children. These were theoretically relevant to help in shaping the personality of the child (Rabkin, 1965). Items were usually weighted or scaled for response significance. They were presented in cliché or truism fashion to minimize the threat to the subject and therefore distortion in meaning. This approach was used originally to measure attitudes of mothers, but it was revised to assess attitudes of parents or deviate persons.

Claimed advantages of using scales is that they are both objective and easier to use. Disadvantages which tended to diminish the validity centered about two factors:

(1) What is measured can only be seen in a here-and-now content, negating historical continuity, and (2) it is difficult to establish a relationship between and expressed attitude and actual behavior (Rabkin, 1965). Inversely, attitudes measured in a therapeutic setting seemed to reflect idealistic or guilt-ridden portraits (Rabkin, 1965). Even though Rabkin (1965) cited studies which tended to show a lack of relationship between attitudes and behavior others have argued that these measures could reveal differences between family members. In view of the recent research which uses a systems approach for its theoretical position, these relationships have been found useful in assessing interaction (Satir, 1964; Alexander, 1973; Pettyjohn &

Spiegel, 1974). Since children's perceptions of parents' behavior have more significance than the actual parental behaviors, it is important to stress interaction rather than simple observation.

Self-report devices. The most frequently employed approach for measuring typical behavior of persons in every day life has been the use of printed tests in which the individual was required to describe self (Nunnally, 1967). Nunnally stated that "...self-inventories essentially ask the individual: 'What is he like as a person? Show us by responding frankly to the following items.'" (Nunnally, 1967, page 574). Self-inventories are described as something more than a printed test, but should be distinguished from inventories which do not ask the respondent to describe self. A disadvantage in using the self-report scale is that socially desirability, where the respondent tends to describe self in a more socially desirable way, distorts answers (Edwards, 1957). Youths do this to the extent that it makes it more difficult to differentiate between the delinquents and nondelinquents (Kilburn, 1964; Kirk, 1973). Some become very clever at appearing as nondelinquents, even when incarcerated. Such social acquiescence is a problem in developing test stimuli (Pepinsky, 1967; Berg, 1967).

Summary of measuring instruments and methods. The measurement methods illustrate a variety of approaches, each with strengths and weaknesses. For the present instrument, scale items from the Glueck & Glueck studies (1950, 1974) were a primary source both for the items and for the dimensional categories. Other studies

which reflected a broader range of delinquency theories were also used to suggest items or for assessing them (Sullivan, 1953; Shore, 1971; Spiegel, 1971; Howells, 1971; Moles, et al., 1959; Walker, 1972).

The items in this study asked two general kinds of questions: (1) "What are you like as a person?" and (2) "What things seem to be going on around you?" The seriousness of his problems were reflected on a five-point scale. The items were designed to help respondents conceptualize factors about family, school, and social systems which influenced the behavior of the self-system (Wheeler, 1972). Special care was taken to insure a standard presentation.

Several choices were available for scaling the responses to items. Each of the two major varieties of rating scales, the Thurstone type and the Likert type, have advantages and disadvantages. The Thurstone-type scaling system uses items which have been pre-scaled by judges according to psychometric scaling procedures. The respondent marks items with which he or she agrees describe a person or object (Helmstadter, 1970). The Likert-type scale has unscaled items to present for respondents to indicate the amount of agreement with the statement. The Likert-type can be refined by item analysis, and can produce satisfactory results if constructed carefully (Edwards, 1957). The Likert scale is "...the most widely used today because it is usually more easily constructed than the Thurstone scale" (Helmstadter, 1970, p. 370).

Usually, the Thurstone-type scales are presented theoretically as having firmer logic in construction than Likert-type scales. One advantage of the Thurstone-type scale is that it allows interpretation of scores independently of a norm group.

Other types of scaling are the Q-sort and Semantic Differential techniques. The Q-Sort requires much preparation and computation (Stephenson, 1953), and still lacks the popularity which it was predicted to have (Helmstadter, 1970). This type of technique might work better with nondelinquents than with delinquents. For many delinquents who is incarcerated or in detention, sorting cards into piles for 20 to 60 minutes would be a difficult task, particularly if subjects were limited to first or second grade reading level.

Bipolar scales have become increasingly popular, particularly with college researchers. The problem usually occurring with a majority of the delinquent population respondents is their literal (concrete) response patterns, whereas the nondelinquent usually thinks more abstractly. The data might be skewed therefore because of variations in interpretations (Walker, 1973). Idiosyncracies of youth subculture "language" differences may also affect additional response variables in response, varying from subculture to subculture.

The Likert-type scaling was selected for this study because of its simplicity in administration and optimal use of time and number of

Ss. Five response points were used for each item since too many points may become confusing (Nunnally, 1967).

Method

This chapter describes the sample, instrumentation, and procedure. The goal of the study was to assess response differences to a set of test items used to describe delinquent and nondelinquent behavior. A flow chart for identifying steps in testing the instrument is found in Figure 1, showing steps to implement the study.

Appendix B and Appendix C show the standard procedures for administering the instrument and for responding to question which Ss might ask.

The Sample

The design of the study consisted of two major samples of subjects, (Ss) both included boys and girls 13 to 16 years of age. About 90% of the total sample of Ss were Caucasian. The first sample (G_1 , G_2) was used to determine the discrimination power of the set of items. The second sample (G_3 , G_4) served as Ss for cross-validation purposes. In Phase 1, the first group (G_1) had 100 delinquent youths who had been incarcerated for three days or more in a Utah County Detention Center, while the second group (G_2) had 100 nondelinquent youths, who as day students in educational institutions had no record of legally delinquent behavior.

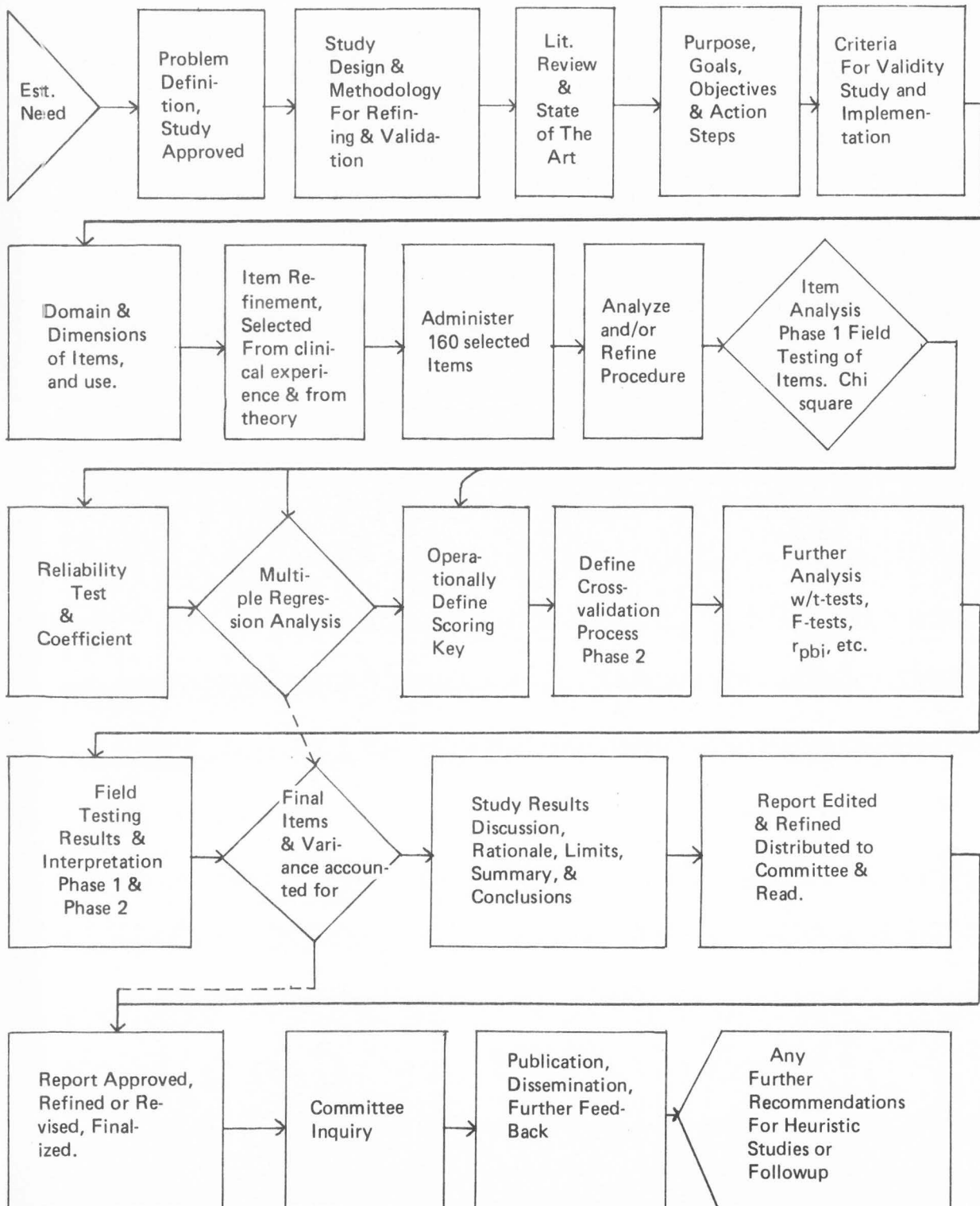


Figure 1. Flow chart used as a guide to the steps in testing a set of items as a basis for discriminating types of behavior.

In Phase 2, the third group (G_3) had 25 delinquent youths from a county detention center in Nevada, while the fourth group (G_4) had non-delinquent youths from another private school in Clark County, Nevada.

For the delinquent group about 75% of the total number of Ss in an institution were randomly selected for that day. Also, the days of the week in which Ss were tested were randomly selected, so that tests were administered equally over all days of the week.

Previous administration of items in the institutional setting revealed that Ss who were recently incarcerated either responded negatively or exhibited high social desirability outcomes. The three day minimum residency of delinquent Ss was required in an effort to avoid measuring an "incarceration effect" rather than the "dyssocial proneness" for which the items were selected. The items were read to Ss by the administrant because of the wide range of Ss reading abilities.

The nondelinquent Ss usually exhibited average reading ability at the level of these items; non-the-less the items were read to all Ss. This helped to standardize the administration procedures. For both samples, the selection of Delinquent Ss was accomplished by using the descriptions in Table 1. The first five levels (1 - 5) were descriptive of nondelinquents, while the last five levels (6 - 10) were descriptive of delinquents.

In both samplings, it was necessary to obtain permission to test youths. The institution directors were asked to cooperate in providing

clearance for testing and in obtaining parental authorization to test the Ss. The form for parent (or guardian) to authorize testing is shown in Appendix D.

The first sample was used to determine item response discrimination on the prime set of items. The second sample responses were scored from those items in the "tested item set" for the purpose of cross-validation.

Instrumentation

The instrument used in this study was a self-report, pencil and paper instrument. There were 160 items in the set used in Phase I. They were presented in the form of statements. At the end of each statement, a five-point Likert-type scale allowed the Ss to mark the statement as true, false, or in between as follows: sometimes true, neither true or false, or sometimes false (as shown in Appendix E).

Many of the items used were selected from statements made by youths, parents, and other adults who had participated in counseling situations. They were also selected to describe important theoretical constructs of perceptions regarding success or failure of youths in adjusting to their environment with socially acceptable behavior. Other statements which became items were those selected from observations made by professional therapists over a period of years from contacts with clients in the mental health clinics, schools, and department of justice. The items were constructed for ease of reading after being

tested on children as young as nine years of age for item readability. In the past, children as young as seven years of age have responded meaningfully to most of these items, but sometimes it took assistance from the administration to explain the item.

The general content of these items intentionally coincided with concepts derived from research findings by the Gluecks (1950) in their studies of 500 delinquents and 500 nondelinquents. The Gluecks categorized areas which most successfully discriminated between the two groups, particularly in the realm of the family and its psycho-social interactions by family members. Their significant areas were family cohesion, family discipline, and family affection (Glueck & Glueck, 1950, 1967, 1972, 1974).

Two additional psychological constructs were based for items from which delinquent or nondelinquent youths might be identified by the differences in response to self-esteem and to personal success, particularly in the school setting. These two essential factors were presented as major constructs in one assessment of delinquency proneness (Walker, 1973; Shore, 1971; Wylie, 1960; Cottle, 1972; Cortes & Gati, 1972). All of the dimensions and distributions of items used in this study are shown in Appendix F. These dimensions contain many of the descriptions of nondelinquent/delinquent levels of behavior found in Table 1. The Descriptive steps in the nondelinquent/delinquent cross-section were integrated into guidelines supplied by the U. S.

Office of Youth Development (Annual Report, 1972; Youth Reporter, 1973) and many other sources over a period of years.

Procedure

A trained administrator presented the items. A standard set of instructions was used to show participants how to mark the items (Appendix B). A standard response sheet provided answers to participant questions, as found in Appendix C. The youths occasionally inquired about the purpose of the instrument and whether they could see the test results. Verbal instructions were given from the instruction sheet attached to each set of items, as shown in Appendix E.

Most subjects completed the set within 20 to 30 minutes, but a few took up to 40 minutes. In addition to reading the items, the administrator explained certain words in the items if the youth's ability to read or understand the content of the items was limited.

Phase 1 procedure. Data were collected from 200 Ss for the first part of this study, and placed on scanner sheets for the computer. The split-half and odd-even reliability test procedures for the instrument occurred in Phase I. All 160 items were used for determining the reliability.

Further statistical analysis for this process consisted of a chi square test of independence, the evaluated discrimination power of each item to be evaluated. The responses of delinquent and nondelinquents were completely printed out for each item. If an item discriminated

significantly at one or more points on the Likert-type scale, it was included in items to be selected for Phase 2. Finally a stepwise multiple regression analysis was computed using 90 of the highest discriminating items from the chi square test to determine the amount of variability accounted for by each item.

Phase 2 procedure. Phase 2 cross-validation was completed using the items selected from Phase 1. These were administered to 25 delinquent and to 25 nondelinquent youths. The response sheets were checked with scoring keys developed from the original item analysis. The resulting data were based on total points taken from each Ss profile after applying the delinquent-scaled scoring key to the 80 items which showed the most power in Phase 1 for these behaviors. The scoring keys were coded so that weights could be given for each significant frequency response. The scoring key was marked to weigh each significantly differentiating item.*

The flow chart for Phase 1 and Phase 2 is shown in Figure 2, which shows that the administration of the Phase 2 items to the cross-validation subjects was followed by further analysis of the data. This was done by setting up a frequency distribution which was constructed from scores of the cross-validation populations. A cut-off score was found between the nondelinquents and delinquents. Thus, the scores

*An alternate procedure would be simply to use the full set of final items as selected as if they were all of equal weight. Using one of five alternatives as to frequency made the items more discriminating, but made it necessary to refer to the specific choice as the reader or user wishes to score a particular item.

for each youth placed him or her in a classification. From this, significant or nonsignificant differences were computed for each group.

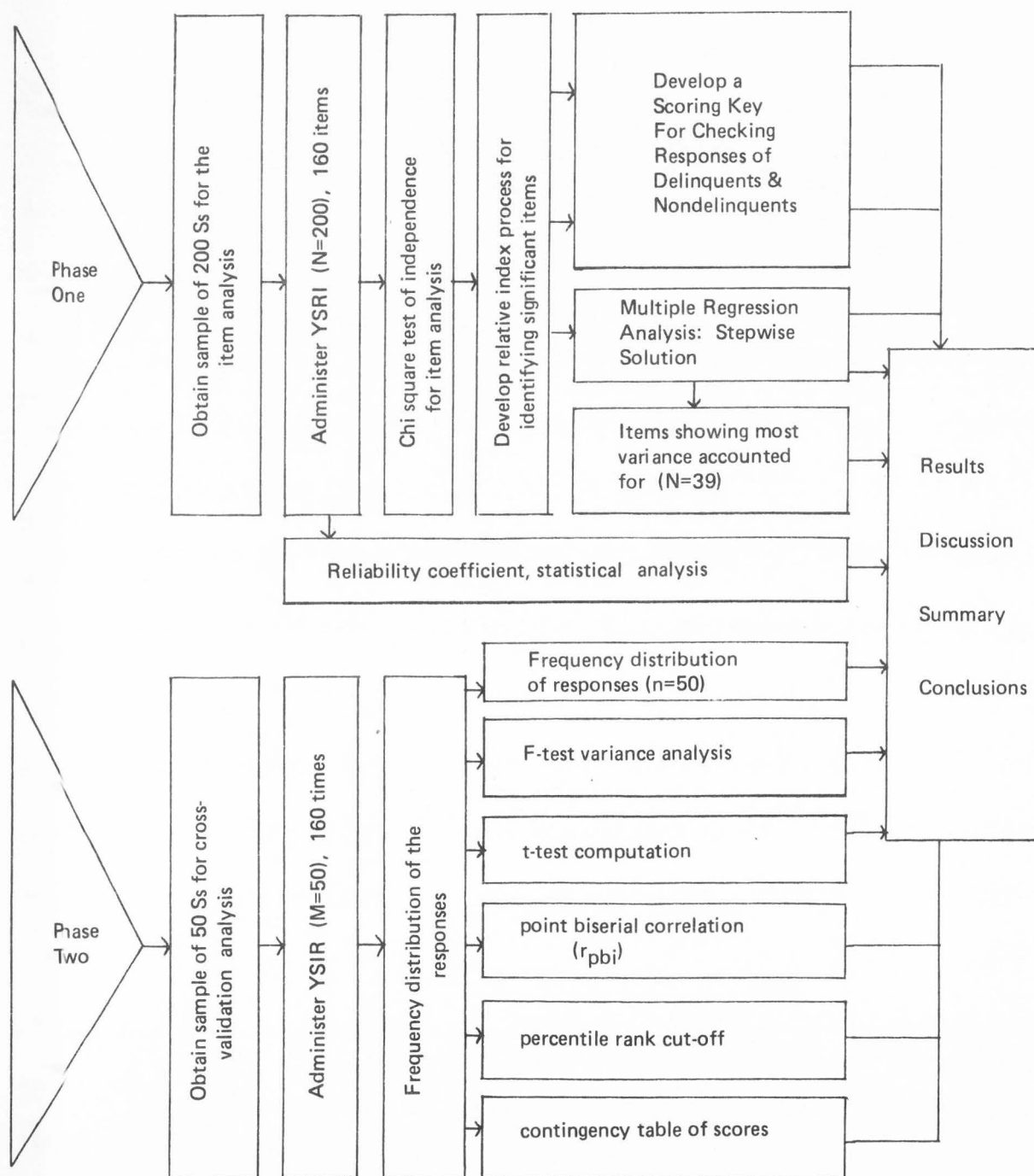


Figure 2. Flow chart for Phase 1 and Phase 2 process.

Results

Introduction

This chapter describes the results for each step in the study. After the data were collected for Phase 1 (200 Ss), computations were made on the 160 items used to elicit responses. The Ss had marked one space on the five-point Likert-type scale (for each item) according to the Ss interpretation of how the item applied to him or her.

The delinquent and nondelinquent groups were classified from their real-life behavior as matched to scale levels given in Table 1. While the delinquent population is actually proportionately smaller in society, for the purposes of this study both groups were equally represented. There were 125 Ss in the delinquent group and 125 Ss in the nondelinquent group. Since the delinquent population had attained the status of legal delinquents because of a juvenile court record, they were classified similarly to the general population of delinquents.

The assumption of the study is that due to physical, social, and psychological experiences, most delinquents learn dyssocial behavior and express it in patterns (Glueck & Glueck, 1950; Cortes & Gatti, 1972; Trojanowicz, 1973; Coffey, 1976). Further, the assumption is that behavior patterns result in different responses to the experimental set of items.

In the following sections, the relationship between responses of both groups of subjects (delinquent and nondelinquent) is examined in Phase 1 and Phase 2.

Phase 1: Item Data and Analysis

This section describes the process for obtaining data for study objective number one (Method's Section), in order to investigate the discriminating power of each item.

Item analysis. A chi square test of independence was first used in the item analysis. The computer printout contained contingency tables for each item to display the variation in responses of the Ss in each group. This allowed analysis of the responses using a computation for significance. Sample contingency tables are shown in Tables 3 and 4 for significant items and for a nonsignificant items.

Table 3
Sample Item Showing Insignificant Responses of Two
Groups: Delinquent and Nondelinquent

Group	Five-point response scale					\bar{X} of the responses
	1	2	3	4	5	
Delinquent	13	13	13	28	28	
Nondelinquent	14	23	15	24	23	
Total Responses	27	36	28	52	51	
Item Loading	0	0	0	0	0	

Table 4
Sample Item Showing Significant Responses of Two Groups

Group	Five-point response scale					\bar{X} of the responses
	1	2	3	4	5	
Delinquent	47	19	8	9	12	
Nondelinquent	71	16	9	2	1	
Total Responses	118	35	17	11	13	
Item Loading	1	0	0	1	3	

A more precise estimate of valid response differences were possible when using this approach, because at each point on the five-point scale the responses were recorded from each of the two groups. Each response point was evaluated separately. For example, the response "often" could reflect a significant difference, while the response of "seldom" may not. Of the 160 items, there were 104 which proved to be significant at the .05 level. Of these 104 items, 80 were higher in numbers of delinquent responses and 24 were higher in numbers of nondelinquent responses to points on the scale. The items which were marked highest by delinquents are shown in Table 5. The (0) means that no significant difference existed between delinquent and nondelinquent responses, while items significantly marked by delinquents are shown by a (1). Items marked highest by nondelinquents are shown by a (2).

Table 5
Significant Items from Phase 1 Process

Item/group*	Item/group*	Item/group*	Item/group*	Item/group*	Item/group*	Item/group*	Item/group*	Item/group*	Item/group*
1	0	33	1	65	2	97	1	129	2
2	1	34	1	66	1	98	0	130	1
3	1	35	1	67	2	99	1	131	0
4	1	36	0	68	1	100	1	132	1
5	1	37	1	69	1	101	0	133	2
6	0	38	1	70	1	102	1	134	1
7	1	39	0	71	0	103	0	135	0
8	0	40	1	72	1	104	0	136	0
9	1	41	2	73	1	105	2	137	0
10	1	42	1	74	0	106	1	138	0
11	0	43	0	75	1	107	2	139	1
12	1	44	0	76	0	108	1	140	1
13	1	45	1	77	1	109	2	141	0
14	1	46	0	78	2	110	1	142	0
15	1	47	0	79	0	111	0	143	2
16	1	48	2	80	1	112	0	144	1
17	1	49	1	81	1	113	1	145	1
18	0	50	1	82	2	114	2	146	1
19	1	51	0	83	2	115	1	147	1
20	1	52	1	84	0	116	0	148	0
21	0	53	0	85	2	117	1	149	1
22	1	54	1	86	1	118	0	150	0
23	1	55	0	87	1	119	1	151	1
24	2	56	2	88	0	120	2	152	0
25	1	57	0	89	2	121	1	153	1
26	0	58	1	90	2	122	1	154	0
27	0	59	1	91	0	123	1	155	1
28	1	60	0	92	1	124	0	156	1
29	2	61	0	93	1	125	1	157	0
30	1	62	0	94	1	126	0	158	1
31	0	63	0	95	0	127	0	159	2
32	2	64	0	96	0	128	0	160	2

- * 0 = response differences not significantly differentiating between delinquent and nondelinquent youths (neither)
 1 = responses of delinquents significantly different than responses of nondelinquents.
 2 = responses of nondelinquents significantly different than delinquent responses to this item.

Item Selection

To evaluate the subject's responses on all items equally, it was necessary to change the direction of the item weighting when the expected response of the statement was toward the "false" end of the scale for nondelinquent youths. The scoring direction was reversed for these so all statements could be weighted in the same direction. The reader can use the appendix of the actual wording if desired.

Reliability. The reliability coefficient was tested, using simple proportions in a split-half procedure. The following formula was used in computing the accuracy of measurement:

$$r_{xx'} = 2 \left(1 - \frac{S_x^2 a^2 + S_x^2 b^2}{S_x^2 c^2} \right)$$

(Cronbach, 1960, p. 59)

The reliability coefficient for the split half and then on the odd-even as follows:

$$(1) r_{xx'} = 0.9944$$

$$(2) r_{xx'} = 0.96635$$

Multiple regression analysis: stepwise solution. Multiple regression analysis was used to evaluate the discriminating power of each item in the set. The procedure allowed response variances to be partialled out using total responses of delinquents and nondelinquents for each test item. This allowed the relative contribution of each item to be assessed. The formula for the regression equation is as follows:

$$Y' = a + b_1 X_1 + b_2 X_2 \dots + b_k X_k$$

In the formula, X is the raw score of the independent variable, that is the predictor items, with Y representing the delinquent-nondelinquent dimension (Kerlinger & Pedhauzer, 1973). The results of the chi square tests provided a basis for selecting the 90 items (of the 104) which best detected the difference between delinquent responses and nondelinquent responses. Then, the multiple regression analysis with a stepwise solution continued the process (computerization) by assessing the relative contribution of each of these items. This stepwise solution identifies variables which were related to Y , plus ranking them in order of their importance. Thus the best subset of X 's was given with the best linear prediction.

In the stepwise solution, the computer first analyzes all variables, then selects the one which partials out the most variance, even though some of that variance may be contained in other variables. After the first variable is examined, the next most important item which accounts for a portion of the remaining variance to responses is found and so on, until no significant variance can be partialled out. The 39 items in Table 6 were the highest significant discriminators.

Item weights for all 160 items are given in Appendix G, and the item list for the highest 90 items is given in Appendix H. The variances for the 39 items were arrived at by pooling the results of two multiple regression analysis computations. In this combination of runs, the

Table 6
Items Derived from Multiple Regression Analysis as Composite
Variables Ranked in Order of Discriminating Ability Between
Delinquent and Nondelinquent Youth Responses

1. During the past 5 years I have had some trouble with the law or police.
2. The grades that I get in school are mostly A's and B's.*
3. There are some very serious problems between my parents.
4. I do not get along well with the establishment (school), it needs changing.
5. The way things are going in our society is really bad for young persons.
6. During my life, I have lived with at least 2 or 3 different families.
7. I never show any respect for teachers or adults who tell me what to do.
8. My father takes time to set down with me and helps me to make my decisions.*
9. I never really trust anyone because people will let you down every-time.
10. My parents seem to make all of my decisions whether I want them to or not.
11. The way my parents act shows that they really love my whole family.*
12. If my mother really wants me to obey her, she may hit me or grab my arm.
13. Because I did something special, I have been given an award.*
14. I seem to need some drugs or alcohol at least once very week.
15. I believe that my father really loves my mother by the way he treats her.*
16. I am interested in school and keep up on the things that need to be done.*
17. My family really likes me and makes me feel that I belong with them.*
18. I never get to tell my side of the story whenever I get into trouble.
19. The way my father acts makes my mother afraid to do what she wants to do.
20. Some persons in my family often try to put me down so that I feel worthless.
21. I have enough self-control to keep working for things in the future.**
22. I wish that I had more power to really control other people.
23. I think that the police and laws are unfair and I want them changed.
24. Persons in my family sometimes play "dirty tricks" that hurt others.
25. The things that I do most of the time make me feel good.*

26. I use my time to get ready for the future so that things will be better then.*
27. My parents show that they really love me by helping me to solve problems.*
28. I am proud of myself that I am the kind of person that I am.*
29. I get punished for things because other persons say that what I do is bad.
30. I have been on less than two dates with someone in all my life.*
31. The things that my father says often makes my mother sad.
32. It's best not to offend other persons who are around you.**
33. I can make mistakes on a test and it does not bother me at all.
34. My parents seem to like my friends.*
35. When my brothers or sisters are punished, it is done in a fair way.*
36. I do not have to be controlled by others, my social behavior is OK.
37. When my parents make me behave now, it will keep me out of trouble later.*
38. Even if they punish me, my parents still seem to love me.*
39. My parents really insist that I get good grades in school.

* Delinquents tended to answer toward the Not True end of the scale. This item had a high response from nondelinquents.

** Delinquent responses were significant around the point 3 on the scale. This appears to indicate a lack of decisiveness, or comprehending what is appropriate.

variances were averaged where there was a difference in rank from one computation to the other. The items, their rank, and the r^2 results are given in Appendix I, in addition to other information concerning the step-wise multiple regression. In the second run, one item which asked "Have you been incarcerated?" was eliminated. This self-fulfilling statement had a strong effect and by eliminating it some shifting in variance relationships occurred.

Item categorization. Data from the multiple regression analyses produced the 39 items seen in Table 6. This accounted for .82784 of

Table 7
 Classification of Items from Multiple Regression Analysis
 and Classified According to Self, Family System,
 and Various Components of the Community
 System. An Assignment of Points
 Was Also Given.*

Classi- fication	No. of Items	Items in Rank Order	Category Points	Total Points
Self	10	9, 14, 18, 21, 25, 26, 28, 30, 33, 36	17	Total 17
Parents	6	10, 11, 27, 37, 38, 39	10	
Father	4	8, 15, 19, 31	9	
Mother	1	12	3	
Family	7	3, 6, 17, 20, 24, 34, 35	14	Total 35
Social/Cult.	4	5, 13, 29, 32	8	
School	3	2, 4, 16	8	
Authority	2	7, 22	5	
Law Enforc.	2	1, 23	5	Total 26
Grand Total				78

*Assignments of numbers are as follows; for Rank Ordered Items 1-39.
 Items 1 through 13 are assigned a weight of 3
 Items 14 through 26 are assigned a weight of 2
 Items 27 through 39 are assigned a weight of 1

the total variance of items. The items were then classified into "types" as a matter of general interest only as shown in Table 7. By using an arbitrary system, a look at the relative influence showed that 45% of the items were in the area of the family. Another 22% were for "self" responses. Finally, 33% of the response points were related to the community area. The value of this analysis was to check on the category or construct range of items so as to add some general meaning to the analysis.

Phase 2: Data and Findings

The cross-validation field testing of the self-report instrument was based upon a selection of the best differentiating items obtained from the Phase 1 process.

Analysis of differences. In order to determine if there is a significant variance or not, an hypothesis of no difference is assumed. The t-test used in this part assessed the capability of the items to discriminate delinquent from nondelinquent subjects in a new sample.

The item analysis in Phase 1 revealed which items discriminated between responses of delinquent and nondelinquent youths. Then, with the selected item set, scores were obtained for each delinquent and nondelinquent in the cross-validation process (Phase 2).

In this study with two samples, the nondelinquent and the delinquent means were studied. The result of the t-test computation was as follows:

$$t = \frac{22}{4.32} = 5.09$$

The computation of the t-test reveals a significance at the level of $p = .001$ or less.

The contingency table plan used to display the cross validation data is shown in Table 8.

Table 8
Contingency Table for Cross-validation Data

	Delinquent Nondelinquent (as measured)	
Actual No. Ss, Delinquent	A	B
Actual No. Ss, Nondelinquent	C	D

Contingency Table Criteria

Table 8 was constructed to accommodate the following contingencies:

- A = Ss identified correctly as delinquent youths
- B = Ss identified incorrectly as delinquent youths
- C = Ss identified incorrectly as nondelinquent youths
- D = Ss identified correctly as nondelinquent youths

Table 9 contains the results of the cross validation analysis. It indicates that about 78 percent of the youths were placed in the category corresponding to their field classification.

Table 9
Contingency Table Display of Cross-validation Results Taken
from Scoring Key Data and Using Cutoff Scores to
Determine if Youth Should be Classified
as Delinquent

	Delinquent (using scores)	Nondelinquent
Ss categorized as Delinquent	(A) 21	(B) 04
Ss categorized as Nondelinquent	(C) 08	(D) 17

(B) and (c) show the false positive or false negative derivations.

Summary. In Phase 1, where a set of 160 items used to describe delinquent and nondelinquent behavior were tested, 104 were found to discriminate between delinquents and nondelinquents significantly (5% level or better) when using a chi square test of independence procedure. When 90 of the most effective items were further tested in a multiple stepwise regression analysis, 39 accounted for 0.827 of the variance between the two group's responses. When these were used in a further validation on a second group of mixed subjects it was found that 78% were correctly classified as delinquent or nondelinquent. Items pertaining to fathers were more significant than those related to

mothers. Of the social systems, the family system contained the greatest number of discriminating items.

Discussion

Scope of Study

It was the purpose of this study to develop a set of items to be used to evaluate dyssocial behavior. The procedure and test also included the often recommended follow-up step of taking the selected items and testing their effectiveness on another group of mixed subjects.

The study began as a response to the critical need for improved methods of assisting youth treatment specialists and parents to identify critical needs revolving around evaluating and changing dyssocial behaviors. Such behaviors range from delinquency-prone behaviors to criminal acts.

The search for an effective instrument to identify delinquency and severity of delinquency revealed a definite need for a few look at the problem that was best handled historically in the work of the Gluecks (1950, 1974). A useful instrument should measure the cumulative environmental influences (especially community, school, family, and self) (Glueck & Glueck, 1950, 1974). It should produce quantitative scores for comparative purposes or allowing operational definitions to be used (Cattell, 1973; Helmstadter, 1970). If it could help to

identify immediate disruptive patterns within the family system (Watzlawick, et al., 1974; Parsons, 1972, Alexander, 1973; Alexander & Barton 1976), then intense-dyssocial behavior, or even mild-dyssocial behavior patterns might aid in improving the perceptions of mature social behavior (Gibson, 1970).

Item identification. The results of this study indicated that items could be found which were useful in identifying delinquent responses as compared to nondelinquent responses. More were available to describe problem behavior than to define adequate social behavior. The items were selected to measure cumulative experiences as well as interaction, but these selection principles could not be used diagnostically in two separate parts of a test.

Recommendations for further item use. When the entire 160-item instrument has been used in the several settings, youths usually objected to its length. However, using the items which account for most of the variance in responses between groups, it is possible to administer as few as 39 items (Table 6) with considerable assurance. This 39-item group could be given in a fifteen minute time period, even if someone read the statements, particularly if youths had a reading handicap.

The nondelinquents who gave false-positive response results (see Table 9) in the cross-validation process were found to have been in difficulty with law enforcement agencies at various times, but the

severity was not great enough to incarcerate them. Therefore, items in the instrument which ask for a response concerning trouble with law enforcement should be maintained so that an examiner may have access for an interpretation of results. Some delinquent youths were able to intentionally present a false positive response to many items. More needs to be done to estimate "faking" (Edwards, 1957, 1957; Berg, 1967, Helmstadter, 1970). Social desirability response set can be countered by observing youths in varied settings, and examining their past records.

Several reasons were found for youths to avoid incarceration, even though some had managed to commit intense-dyssocial or criminal acts. Records over a period of time and in a variety of situations revealed the following list which partially accounts for avoidance to incarceration:

1. Youths had managed to evade police officers.
2. Youths had a superior advantage because of family status.
3. Youths talked their way out of trouble.
4. Detention centers were full so there was no place to take them.
5. Youths received alternative treatment for dyssocial behaviors.
6. Youths moved, record was lost, or youth denied having record.

(Utah Juvenile Court Records, 1970-1974)

Naturally such violations influence the validity of the categorization of youths into delinquent and nondelinquent classification because the groups are not fully representative.

The findings of this study apply to delinquent and nondelinquent youths who belong to groups similar to those measured in this study. Since "delinquency" exists in degrees and kinds, care is needed to match other groups tested to the groups described here. There may have been some limitation for generalizing the items by reason of a lack of exact matching of delinquent and nondelinquent youths on the basis of sex, age, education, intelligence, or social status. If the principle constructs used in these items are valid, such demographic nomenclature should not control the outcome, i. e., that discriminating ability or power should still exist.

Gibbon (1970) presents evidence that in a great many instances, delinquents really do not think, talk, or act much different than the nondelinquent, at least from a psychological standpoint. What this study does show is that a mixed group can be classified at around 75% accuracy. This in no way implies that a given youth can be classified. Individually, the parent or clinician can use the items as a guide to interviewing and for discussion. This reflects a severe limitation in the state of the act.

Study, research, and therapy possibilities. Recommendations for further investigations are generated as a result of this study investigation. These items may be useful in the school, court, and

for clinical use. The literature suggests that dissocial behavior develops the family system. This challenges the investigator to describe how behavior dynamics develop in this setting. It has been difficult to gather systematic information from homes or families except for special purposes (Mishler & Waxler, 1968). These items may provide a way to measure the problem at an earlier stage in development.

A form of therapy could be developed around the family system by eliciting the "help" of a dyssocial or acting-out juvenile's family. The items could be used as topics to examine patterns of change, not only for the youth in treatment but also for other family members who respond to the items.

In order to provide treatment for dyssocial behaviors, an unusual amount of knowledge is needed by treatment specialists in the areas of cause, control and prevention of delinquency. Adults who are inadequately trained or tend toward "acting-out" themselves may actually contribute to dyssocial behavior in children (Coleman, 1972; Trojanowicz, 1973). Therefore those items reflecting study topics could be used in adult education programs.

Complications arising in trying to solve these kinds of behavior problems because the nomethetic (group) and the idiographic (self) details of behavior, or both must be considered (Allport, 1968; Getzels, 1958; Frey, 1973; Barton, 1973). If only a social approach is

presented as an issue, then the intrapsychic factors are likely to be neglected. Caplan and Nelson described these twin needs as follows:

Problem definitions are based on the assumption about the causes of the problem and where they lie. If the causes of delinquency, for example are defined in person-centered terms (e.g., inability to delay gratification, or incomplete sexual identity, then it should be logical to initiate person-change treatment techniques and intervention strategies to deal with the problem.... Such treatment would take the form of counseling or some other person change for self control...

If, on the other hand, explanations are situational-centered for example, if delinquency were interpreted as the substitution of extralegal paths for already preempted, conventionally approved pathways for achieving socially valued goals, then efforts toward corrective treatment would logically have a system-change orientation (Caplan & Nelson, 1973, pp. 200-201).

Hopefully, studies like the one described by Cortes & Gatti (1973) that recommended broader interdisciplinary approach would have potential for developing the new methodologies needed.

Summary and Conclusions

The Problem

This study began as an exploration to find methods of measuring differences in the responses of two social groups: delinquent and non-delinquent. The study tested items describing behaviors related to self, family, school, and community activity, along with items representing psychological, sociological, and biological bases of behavior (Glueck & Glueck, 1950, 1974; Hathaway & Monchesi, 1953; Kvaraceus, 1959; Jesness, 1963; Gough, 1964, Cottle, 1972; Cortes & Gatti, 1972; Cressey & Ward, 1969; Quay & Peterson, 1958; Trojanowicz, 1973; Coffey, 1976)

Goal

The major goal for research with the present study instrument was to identify a set of items which might significantly differentiate between the responses of individuals who were classified as delinquent compared to the nondelinquent.

Procedures

The procedures for developing the items were as follows:

1. Examine the current status of delinquency research, its theories and its applications to identification, causation, control,

treatment, and prevention.

2. Search the literature for reports on theoretical constructs which have been implemented or applied in the field, particularly test instruments.

3. Look for instruments in the literature which had some reported capability for measuring cumulative and concurrent effects of a youth's social systems.

4. Collect a set of items representing a variety of social behaviors.

5. Use both an item analysis and cross-validation process to test these items on two groups, first to refine the item set, and then to estimate its usability to classify youths as to their delinquency status.

Items

The items used in this study were collected over a 10-year period to be representative of what youths said about their perceptions of how transactions within social systems affected their behavior.

Items were collected by interviewing clinical psychologists, psychiatrists, sociologists, mental health administrators, school officials, and some other adults and children. A majority of the items were collected as a result of intensive short-term counseling with youths from juvenile courts and other treatment situations in mental health, health, and education. Many of these themes and topics for

items had appeared in the Glueck studies, (1950, 1972) as well as others (Schaefer & Bell, 1958; Moles, et al., 1959; Shore, 1971; Walker, 1972). The items were grouped by content into five dimensions, which were family togetherness, family supportiveness, limit-setting and behavior consequences, self-esteem and success, and school functioning.

The items were presented sequentially in the instrument within each dimension in turn. Item was placed in the series of dimensions, and then the series was repeated. The 160 items used in this study were designed for optimal ease of reading, understanding, and eliciting the most accurate responses from youths, particularly those who were delinquent. Little difficulty was reported by nondelinquents in understanding and responding to the items, which was enhanced by the administrant reading the items aloud.

Groups Used in the Study

Since the items were used in this study for differentiating responses, the design required two major groups which were independent of each other, with delinquent and nondelinquent subgroups in each major group. The major groups were used, one for the item analysis to identify possible useful items, and one group used for cross-validation purposes. Each group was composed of 50% nondelinquents and 50% delinquents. The observed subgroups generally coincided with

the variations of intensity of observed youth activity as was described in Table 1 (page 7). The two major groupings of subjects were described as follows:

Delinquent Group. For the Phase 1 (item analysis) procedure, the groups was taken from a detention center in Salt Lake County. For the Phase 2 (cross validation) procedure, a group was taken from the Clark County (Nv.) detention center. Youths had been there for three days or more. Entire populations of untested youths were taken on randomly selected days.

Nondelinquent Group. For the Phase 1 (item analysis) procedure, the group was taken from parochial schools in Salt Lake City (Ut.). These youths had never been incarcerated and were average readers. For the Phase 2 (cross-validation) procedure, the group was taken from parochial schools in Clark County (Nv.).

Major Findings and Conclusions

The instrument items were administered successfully to 250 youths who ranged in age from 13 to 16 years.

The item analysis statistic (chi square test of independence) revealed that 104 items of the 160 item instrument differentiated between responses of delinquents and nondelinquents.

The most powerful 90 items from Phase 1 which significantly discriminated delinquent from nondelinquent responses were then used in Phase 2. In this validation procedure 78% of a mixed group were correctly identified.

The instrument reliability coefficient of 0.90 + for the 160 items was high enough to provide reasonable assurance that the subjects in this study were responding consistently.

As a supplementary procedure, the process of multiple regression analysis (stepwise solution) was used to place the items in a progression, according to how much variance was accounted for by each item between the delinquent and nondelinquent responses. A set of 39 items (Table 6) was selected as the best core (short-form) of items to provide a context for defining delinquent behavior. This core of items accounted for 83% of the total instrument variance. Time did allow this shorter version to be tested on a third set of subjects.

In conclusion, both objectives were achieved since the items provided a usable level of effectiveness in identifying whether youths were delinquent or nondelinquent.

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APPENDIXES

Appendix AInventory Items (160)

1. All persons should act like they are really proud of themselves.
2. Most persons have good success only because they have good luck.
3. My home is a place that makes me feel good when I am there.
4. My parents seem to make all of my decisions whether I want them to or not.
5. I believe that my father really loves me.
6. Youths should control themselves so that others do not have to control them.
7. People are always telling me that I need to change the way I am.
8. Everyone in my family seems to like themselves and what they do.
9. My father takes time to sit down with me and helps me make my decisions.
10. I believe that my mother really loves me.
11. When you go some place you should try to make friends with many people there.
12. When I am told to do something I do it rather than cause any trouble.
13. I believe that my father loves my mother by the way he treats her.
14. My parents make me feel like a bad person when they try to make me behave.
15. I spend as much time with my father as I want to.
16. It's best not to offend other persons who are around you.
17. I feel like I am losing control of things, even myself sometimes.
18. There is someone around to comfort my mother when she is feeling bad.
19. My parents punish me in a very fair way so that I do not feel like a loser.
20. I spend as much time with my mother as I want to.
21. One of the best things that you can do is to help others a lot.

22. My religious (or spiritual) life is just the way that I would want it to be.
23. Because of the way my father acts, my mother is afraid to do what she wants to.
24. When my brothers or sisters are punished, it is done in a fair way.
25. My father helps me anytime and with anything that I need.
26. You respect teachers or other adults only when you happen to feel like it.
27. I do a lot of daydreaming about things, but do little to make them come true.
28. My parents seem to be happy about everything that I do.
29. My parents punish me more than they do the other family members.
30. My parents show that they really love me by helping me to solve my problems.
31. Youths should always get along okay with those who are about the same age.
32. I have been on less than two dates with someone in all of my life.
33. My father and mother get very angry with each other when they do not agree.
34. I have enough self-control to keep working for things in the future.
35. My mother helps me anytime and with anything that I need.
36. Youths should always get along okay with older adults (those over 30 years).
37. I go on about 2 dates each week with someone.
38. Everything seems bad for me at home and it is worse when I can't say anything.
39. When someone makes me angry I often imagine how to really get even with them.
40. I am afraid to ask my parents for the things that I really need or want.
41. Youths should show much interest in school work.
42. I believe that I fail in life more than anyone else.
43. When he is trying to get something done, my father never yells at us.

44. My brother or sister is the one who really punishes me most.
45. My father always enjoys being around our family.
46. Students should have more interest in art, music or sports than in classwork.
47. When she is trying to get something done, my mother never yells at us.
48. I get punished for things that I can't control.
49. There is no one around my house who really makes me behave.
50. My mother always enjoys being around our family.
51. You should always treat persons around you like you really like them.
52. I think that the police and laws are unfair and I want them changed.
53. My parents seem proud of themselves, always doing the things that they want to.
54. Most of the time my parents do not agree about the things that I should do.
55. My father often puts his arm around me and says that things will be all right.
56. You should treat those in your family so good that you always get along okay.
57. I like my body just the way it is, there is nothing I want to change about it.
58. My family really likes me and makes me feel that I belong with them.
59. I do not get along at all with the establishment (school), it needs changing.
60. My mother often puts her arm around me and says that things will be all right.
61. Youths should have several close friends to help when needed.
62. I like the way I act and do not want to change my behavior.
63. People in my family ask me to help make some of the bigger decisions.
64. My parents nag me too much about taking care of things, especially my room.

65. My parents really get excited when I make a mistake, usually putting me down.
66. It makes little difference in your life if you get into trouble with the law.
67. Nothing seems to stop me from doing the things that I want to do.
68. I am as important as anyone in my family.
69. I take care of my stuff very well and even keep my room clean most of the time.
70. My parents are divorced.
71. Everyone should get good grades in school.
72. I seem to need some drugs or alcohol about every week.
73. My family promises to do a lot of good things for me, much of which they never do.
74. I cheat in school when I need to, or when I can get away with it.
75. My father really seems to trust me.
76. Youths should stay out of trouble so they will not have to go to court.
77. People do not seem to like me very well.
78. Things that my father says makes my mother seem sad.
79. My parents should set strict limits on what I can do and where I can go.
80. My mother really seems to trust me.
81. I do not have to be controlled by other people, my social behavior is okay.
82. One of my biggest problems would be over if I just had more money.
83. Things that my mother says makes my father seem sad.
84. I never seem to win when there is an argument with persons in my family.
85. My parents never seem to have time to worry about my problems.
86. I am proud of myself and that I am the kind of person that I am.
87. The way things are going in our society is really bad for young persons.
88. My parents always let me have parties in our home with my friends.

89. I use my time to get ready for the future so that things will be better later.
90. My parents usually make me feel dumb or guilty when they punish me.
91. I always get along with people and make good friends, even in a new place.
92. I belong to two or more school clubs, or groups like that.
93. During my life I have lived with two or three different families.
94. If my mother really wants me to obey her, she may hit me or grab my arm.
95. My parents should love me because I am a member of the family.
96. I usually do things that make other persons like me.
97. I really lose my temper when things do not go right for me.
98. The way I think and feel about things is the same way my parents think and feel.
99. If my father really wants me to obey him, he may hit me or grab my arm.
100. Persons should spend their money when they get it rather than save it.
101. I do many good things to help other persons.
102. My friends teach me more of what I want to know than my parents do.
103. My friends or my family tell me that I am a good leader.
104. The person that I want to be like most is not in my family.
105. I never really trust anyone because people will let you down everytime.
106. I never show any respect for teachers or adults who tell me what to do.
107. Because I did something special, I have been given an award.
108. My parents tell me that I never seem to make the right decisions.
109. Even if they punish me, my parents still seem to love me.
110. My mother or father has loved me for as long as I can remember.
111. Persons who are about my same age are easy for me to get along with.

112. Reading is my best class in school.
113. Other youths have a better chance to get what they want than I do.
114. My parents have often put me down (punished me) in front of my friends.
115. I do things for my parents that makes them feel good.
116. Persons who are older (over 30 years) are easy for me to get along with.
117. Since my health is all right I feel good most of the time.
118. The church activities that I do are what makes my parents proud of me.
119. When my parents tried to control me too much, I made plans to run away.
120. I am proud of my family, they always seem to know the right thing to do.
121. I am interested in school and do the things that I need to so as to keep up.
122. The things that I do most of the time seem to make me feel good.
123. My parents seem to like my friends.
124. My parents always punish me for things that they say that they are going to.
125. There are some very serious problems between my parents.
126. I am interested in such things as sports, art and music, more than in schoolwork.
127. I can make mistakes on a test and it does not bother me at all.
128. I do really well in sports, or art, or music so that it pleases my parents.
129. My parents never give me an allowance even if I do good work.
130. I get lots of praise around the house for the good jobs that I do.
131. I treat the people around me like they are really special.
132. No other person has as much trouble in working out their problems as I do.
133. My parents really insist that I get good grades in school.
134. I get punished for things because other persons say that what I do is bad.

135. My father or mother told me that they loved me within the last year.
136. I treat other persons in my family so good that I get along with them fine.
137. Older adults treat me like I am an important person.
138. There is someone in my family that I can talk to about my important things.
139. I wish that I had more power to really control other people.
140. My parents trust me with good things like a car, tools, clothes.
141. I have friends who are very close to me and they help me when I need help.
142. Someone is always around to let me know how bad I am when I make a mistake.
143. During the past year, someone has said that my family is really happy when they are together.
144. I never get to tell my side of the story when I get into some trouble.
145. Persons in my family sometimes play "dirty tricks" that hurt other members.
146. During the past 5 years I have been in some trouble with the law or police.
147. My family has moved at least 4 or 5 times since I can remember.
148. I believe that things will soon turn out the way that I want them to.
149. When my parents make me behave now it will keep me out of trouble later on.
150. Members of my family seem to really enjoy doing things as a family group.
151. The grades that I get in school are mostly A's and B's.
152. I control my anger so well that others do not know how I really feel inside.
153. My parents spend more time entertaining or having fun than they do with me.
154. I stay angry for a day or two after I have been punished for something.
155. Some persons in my family often try to put me down so that I feel worthless.

156. In the past 5 years I have had to go to juvenile court at least one time.
157. It seems impossible for me to ge quiet for very long, I must keep very busy.
158. At least 1 of my parents usually works at a regular job.
159. If someone tells me to do something, even if I think it is wrong, I usually get talked into doing it anyway.
160. The way that my parents act shows that they really love my whole family.

Appendix BDirections for Administering Items

STEP I. Introduction: (SAY: - To Persons Who Mark the Inventory)

I am going to ask you to mark something on this paper. It's to indicate whether you agree with the sentences on this inventory. It has sentences about you, your parents, family, school, and community. Sometimes adults seem to create problems for younger persons that are not necessary. These sentences are about how you feel, and about what seems to be happening to you.

Your answers are placed with hundreds of others, and will help parents, teachers, and others to understand more about younger persons. If you really want to help in this way, your answers must be given just exactly like you feel, not what someone around you thinks. Mostly, this gives you a chance to have an opinion about what you think is happening to you.

OKAY, now don't worry about your answers, because they go no further. No one else sees your responses and we code them so that it's impossible to know where they came from. Actually, no one could remember the answers anyway.

STEP II. (SAY):

Here is the checklist (pass checklists around). There are ideas about yourself, family, school, and the community. Please check each statement after you understand how to do it. There are no tricky statements, so you don't have to try to fake it in any way. The first answer that you think of is usually the best one to give. Only a few sentences require much thought. Since everyone has problems, conflicts and sometimes feel like failures, we just want to know which problems are giving you the most trouble. We want to know where your strengths are, also. Just try to mark things as they really are.

STEP III. (SAY):

OKAY, please fill in Box 1 and 2 on the first page. (Administrator must make any explanations about whether name is included, etc.)

(Administrator reads instructions in the following boxes).
(SAY): Look at the other boxes as I read the instructions.
(After the instructions are read, SAY): You may now begin to mark your answers as I read the first sentence. I may read other sentences on the pages when it seems helpful. Please mark your own answers, and wait until everyone has finished before saying anything about how you marked them. Thank you. (Now read the first sentence, etc.)

Appendix CStandard Responses for Questions Asked

1. How am I supposed to know how to mark the answer? There are no good or bad answers, or right or wrong answers. You should answer the statements just as you feel, and as accurately as possible.
2. What reason do you have for giving us this test? The research program which I have is trying to identify and study some of the problems that happen among family members, which are caused by fear, anger and unclear messages.
3. How can this help my family? We find that there are problems between almost all youths and adults (especially parents) which seem to have a communication basis. Both youths and adults need to know about each other.
4. How did you find out all of this? Hundreds of families have indicated that they have some good feelings and some bad feelings between the members. Generally, children in a family are more aware of these than the adults, so we want to help educate parents about important things.
5. How will taking this test be useful to me? It is an unusual experience for most youths to check this list of sentences because many of these things are not talked about with even your good friends. These should not be ignored because they are important. It shows where some problems are.
6. Why should I be so careful about how I check these? The way people check these sentences shows how they can solve their problems. No one is perfect so please do not try to fool yourselves or us. We just want to know how you feel about yourself, your family, school or other people.
7. How will I know if I checked it right or not? If you have any strong feelings about the statements or why you may have answered it the way that you did, we will be glad to talk about it after these checklists are finished.
8. If I want some more information about my scores what do I do? So that we know who you are, we need to know your name or number so that we can get the results to you. The results are shown only to you.

9. Who gets to see our answers, does my _____ see them? Only the persons doing the research see the way that the sentences are checked. This very personal information is kept private, you are the only other one who can see it.
10. How long will it take me to finish this checklist? It can be finished in about 15 to 20 minutes, but more time is available if you need it.
11. What if I cannot read the sentences? The sentences will be read to you (or for everyone) if there is any problem in reading them.
12. What if I have no family (or father, or mother, or others)? This is explained in the directions for checking the sentences. (Repeat the directions if they have already been given)

Appendix DParental Letter of Authorization

Dear Parents:

During the past ten years, a study was made of students who were in school. The study was about the tendency of some youths to avoid getting into trouble with the law, as compared to students who did not. The main question that has been asked is how youths get to be winners or losers. There are three areas of interest. One is the community, another is the school, and the last is the home. There is a checklist which the student marks that shows how he feels about these things.

The students who are selected to respond to the checklist are the normal, average students. These students are then compared with those who have had severe problems, so that the contrasts can be seen. One thing that parents seldom have an opportunity to do is to find out how their child really thinks about himself and his environment. The results can be made available. You may ask for an appointment to see the project director.

The checklist avoids anything which would cause embarrassment to you or the child, or anyone else. The sentences are given and the student just marks how much he agrees with the sentence, or he may disagree. The checklist sentences came from hundreds of parents, students, and people who work with youths. The sentences listed in the checklist are the results of what these persons indicated was the most important to the students between the ages of nine and nineteen years of age.

The results of this checklist are strictly confidential. No one in the school has access to the way the checklist is marked. The results can be released if the parent authorizes it in writing, then it is just a profile which is not indicative of individual markings.

We would like to have this letter returned with your signature by tomorrow. Someone will probably call you if it has been two or three days since the letter was sent. Please check one of the following:

_____ I will allow my child to mark the checklist.

_____ I refuse to let my child mark the checklist.

Signed: _____ (Parent or Guardian)

Name of Child _____

Thank you very much for your help and cooperation.

Sincerely, _____ Project Director

Appendix EDirection Sheet for Participants

No. _____
 Days _____
 Times _____

Box 1:

Name _____ Age _____ Birthday / / Date / /
 Address _____ Parent _____
 Male _____ or Female _____

Box 2:

Please check if a student _____, or not a student _____.
 Check the highest grade or level of education: Univ. _____,
 College _____, Tech _____, High School _____, Junior High _____,
 Grades 6_5_4_3_2_1_.

Box 3:Directions for Marking the Spaces at the End of the Sentences:

1 2 3 4 5

Not true-true

Mark No. 1 if it seems false (Usually not true) Mark it like this ~~()~~() () () +
 Mark No. 2 if is some false (Often not true) Mark it like this () ~~()~~ () () +
 Mark No. 3 if neither true or false (or both) Mark it like this () () ~~()~~ () +
 Mark No. 4 if somewhat true (Seldom false) Mark it like this () () () ~~()~~ +
 Mark No. 5 if it seems true (Usually not false) Mark it like this () () () () ~~()~~ +

Box 4:Special Instructions for a Partial Family Unit:

- a. When the word father is used, if there is no father in the home, mark it as if any other man in the home is the father. He may be your stepfather, grandfather, or other man.
- b. If your real mother is not living in the home, mark it as if the woman who is there is your mother. She may be stepmother or other woman.
- c. If there is only one parent in the home, mark your answer as parents.
- d. If a sentence says father, and there is no father or other man in the house, mark it in the No. 3 space. If there is no mother or other woman in the house, mark it No. 3. (As above in Box 3)
- e. If there are other children living in your home, mark them also as if they were brothers or sisters.

Appendix FList of Items in Each Dimension

Dimension No. 1	Dimension No. 2	Dimension No. 3	Dimension No. 4	Dimension No. 4
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52	53	54	55
56	57	58	59	60
61	62	63	64	65
66	67	68	69	70
71	72	73	74	75
76	77	78	79	80
81	82	83	84	85
86	87	88	89	90
91	92	93	94	95
96	97	98	99	100
101	102	103	104	105
106	107	108	109	110
111	112	113	114	115
116	117	118	119	120

Appendix F (Continued)

Dimension No. 1	Dimension No. 2	Dimension No. 3	Dimension No. 4	Dimension No. 5
121	122	123	124	125
126	127	128	129	130
131	132	133	134	135
136	137	138	139	140
141	142	143	144	145
146	147	148	149	150
151	152	153	154	155
156	157	158	159	160

Appendix G

Items and Weights Assigned from Item Analysis

Item, Weight	Item, Weight	Item, Weight	Item, Weight	Item, Weight	Item, Weight	Item, Weight	Item, Weight
1	0	36	0	71	0	106*	2
2*	3	37*	1	72*	9	107**	1
3*	2	38*	1	73*	1	108*	1
4*	2	39	0	74	0	109**	2
5*	2	40*	2	75*	1	110*	2
6	0	41**	1	76	0	111	0
7*	1	42*	2	77*	1	112	0
8	0	43	0	78**	2	113*	1
9*	3	44	0	79	0	114**	2
10*	3	45*	2	80*	2	115*	1
11	0	46	0	81*	2	116	0
12*	1	47	0	82**	2	117*	2
13*	2	48**	4	83**	1	118	0
14*	1	49*	2	84	0	119*	1
15*	2	50*	4	85**	1	120**	2
16*	1	51	0	86*	1	121*	2
17*	1	52*	5	87*	1	122*	1
18	0	53	0	88	0	123*	2
19*	2	54*	1	89**	2	124	0
20*	1	55	0	90**	2	125*	4
21	0	56**	1	91	0	126	0
22*	3	57	0	92*	2	127	3
23*	2	58*	4	93*	6	128	0
24**	2	59*	3	94*	1	129**	1
25*	3	60	0	95	0	130*	1
26	0	61	0	96	0	131	0
27	0	62	0	97*	1	132*	2
28*	2	63	0	98	0	133**	2
29**	1	64	0	99*	1	134*	1
30*	1	65**	1	100*	1	135	0
31	0	66*	3	101	0	136	0
32**	2	67**	1	102*	2	137	0
33*	2	68*	1	103	0	138	0
34*	7	69*	1	104	0	139*	1
35*	2	70*	2	105**	2	140*	1

* Predominately higher delinquent responses (may contain non-delinquent points)

** Nondelinquent responses (only) are significant

Appendix HList of 90 Highest Differentiating Items

2	30	67	99	127
3	32	68	102	132
4	33	70	105	133
5	34	72	106	134
7	35	73	107	139
9	37	75	108	140
10	38	78	109	144
13	40	80	110	145
15	42	81	113	146
16	45	82	114	147
17	48	83	115	149
19	49	86	117	151
20	50	87	119	153
22	52	89	120	155
23	58	90	121	156
24	59	92	122	158
25	65	93	123	159
28	66	94	125	160

Appendix I

A Summary Table for the Multiple Regression Analysis*

Variable	Mult. R	R Square	RSQ Change	B	Beta
1	.75325	.56739	.56739	-.11608	-.43067
2	.79113	.62588	.05849	-.05661	-.21239
3	.81327	.66140	.03552	-.03944	-.11706
4	.83015	.66140	.02775	-.04679	-.14505
5	.83862	.70328	.01412	.04114	.12201
6	.84575	.71530	.01202	-.03360	-.09350
7	.85145	.72497	.00967	-.05418	-.14096
8	.85814	.73640	.01143	-.02111	-.06262
9	.86329	.74528	.0888	-.02775	-.08894
10	.86686	.75144	.00616	-.01489	-.04398
11	.86991	.75673	.00530	-.03049	-.08204
12	.87343	.76288	.00615	.02227	.06843
13	.87619	.76771	.00483	.01792	.05257
14	.87891	.77248	.00477	.02837	.09549
15	.88264	.77905	.00657	-.07134	-.21105
16	.88490	.78304	.99399	-.02387	-.06653
17	.88712	.78698	.00394	.05247	.16230
18	.88898	.79029	.00331	.02375	.06665
19	.89090	.79371	.00341	-.02594	-.07774
20	.89264	.79680	.00309	.03950	.10772
21	.89434	.79985	.00305	.04406	.13652
22	.89627	.80330	.00345	-.03985	-.11436
23	.89822	.80681	.00351	-.03143	-.09609
24	.90005	.81009	.00328	.03272	.09742
25	.90175	.81316	.00307	-.01671	-.04884
26	.90329	.81594	.00278	.03234	.08850
27	.90474	.81856	.00262	-.03272	-.08000
28	.90626	.82130	.00274	-.02831	-.07823
29	.90785	.82419	.00289	-.02271	-.05929
30	.90894	.82617	.00198	.01883	.05258
31	.90986	.82784	.00167	.01603	.04621
(CONSTANT)				2.55690	

*The first run

Appendix I

A Summary Table for the Multiple Regression Analysis*

Vari- able	Mult. R	R Square	RSQ Change	B	Beta
1.	0.64521	0.41629	0.41629	-0.09244	-0.34685
2.	0.71104	0.50558	0.08929	0.05359	0.18041
3.	0.75916	0.57633	0.07074	-0.04306	-0.13351
4.	0.78284	0.61283	0.03651	-0.05837	-0.16243
5.	0.79854	0.63767	0.02484	-0.03199	-0.08916
6.	0.80999	0.65608	0.01841	-0.02750	-0.09264
7.	0.81881	0.67045	0.01437	-0.04780	-0.14186
8.	0.82457	0.67991	0.00947	-0.01651	-0.04802
9.	0.82939	0.68789	0.00797	0.04318	0.13267
10.	0.83501	0.69724	0.00935	-0.05811	-0.15117
11.	0.70552	0.70552	0.00828	-0.04185	-0.12411
12.	0.84394	0.71223	0.00671	-0.02585	-0.07636
13.	0.84615	0.71596	0.00373	0.02099	0.05789
14.	0.84841	0.71980	0.00384	-0.03372	-0.10514
15.	0.85023	0.72289	0.00309	0.04334	-0.11820
16.	0.85209	0.72607	0.00318	-0.04001	-0.11563
17.	0.85389	0.72912	0.00306	0.04078	0.11160
18.	0.85687	0.73423	0.00511	-0.04812	-0.13300
19.	0.85877	0.73748	0.00325	-0.04177	-0.12358
20.	0.86034	0.74018	0.00270	0.03783	-0.11722
21.	0.86187	0.74282	0.00264	0.03676	0.10946
22.	0.86376	0.74607	0.00326	0.03034	0.08475
23.	0.86516	0.74854	0.00246	0.03229	0.09218
24.	0.86686	0.75145	0.00291	-0.02596	-0.06780
25.	0.88682	0.75383	0.00238	0.03792	0.11730
26.	0.87053	0.75781	0.00399	-0.02774	-0.08312
27.	0.87251	0.76128	0.00346	-0.02887	-0.06067
28.	0.87418	0.74192	0.00291	0.01798	0.08283
29.	0.87614	0.76762	0.00343	-0.03417	-0.07954
30.	0.87756	0.7701	0.00249	0.02492	0.06603

*The second run

Appendix J

A Summary Table of Ranking Ordering of Items from Both
Multiple Regression Analyses Using Change
in Squared Correlation

Rank	Item	Av. r^2 Change	Rank	Item	Av. r^2 Change
1	81	0.237	21	22	0.004
2	84	0.062	22	77	0.004
3	72	0.049	23	32	0.004
4	34	0.025	24	80	0.004
5	49	0.024	25	70	0.003
6	53	0.018	26	50	0.003
7	58	0.014	27	19	0.003
8	52	0.011	28	48	0.003
9	06	0.011	29	76	0.003
10	03	0.009	30	20	0.003
11	90	0.009	31	43	0.003
12	54	0.009	32	10	0.003
13	50	0.007	33	73	0.003
14	59	0.006	34	71	0.003
15	08	0.005	35	16	0.003
16	69	0.005	36	45	0.003
17	33	0.005	37	83	0.002
18	79	0.004	38	61	0.002
19	15	0.004	39	75	0.001
20	86	0.004			

Appendix K

Final Item Priority with Item Number, Inventory
Number, and Significant Item Points

Item Priority	Item Number	Instrument Item No.	Significant Points on Scale*
0	87	156	NoooD +
1	81	146	NoooD +
2	84	151	DoooN
3	72	125	NOODD
4	34	59	NoooD
5	49	87	NoooD
6	58	106	NooDo
7	53	93	NoooD
8	06	09	DoooN
9	90	160	ooooN
10	57	105	DoooN
11	03	004	NoooD
12	59	107	NooDD
13	40	72	NooDo
14	54	94	NooDo
15	08	13	DoooN
16	33	58	DoooN
17	22	34	DDDNN
18	86	155	NoooD
19	69	121	DoDoN
20	48	86	DoooN
21	19	30	DoooN
22	79	144	NoooD
23	50	89	oooNN
24	43	78	Noooo
25	71	123	DoooN
26	15	23	NoDoo
27	76	134	NoooD
28	77	139	NoooD
29	76	134	NoooD
30	83	149	DoooN
31	32	52	NoooD
32	16	24	ooooN
33	73	127	ooooD
34	10	16	000DN
35	45	81	ooDoN
36	20	32	0000N
37	70	122	Noooo

Appendix K (Continued)

Item Priority	Item Number	Instrument Item No.	Significant Points on Scale *
38	61	109	NoooD
39	75	133	oooNo

* On the five-point scale, the significant differentiating points are marked.

** N is for Nondelinquent, D is for Delinquent (responses which differentiated).

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