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COMPETING CONCEPTIONS OF DELINQUENT PEER RELATIONS

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Introductory Statement

The Center for Social Organization of Schools has two primary objectives: to develop a scientific knowledge of how schools affect their students, and to use this knowledge to develop better school practices and organization.

The Center works through four programs to achieve its objectives. The Studies in School Desegregation program applies the basic theories of social organization of schools to study the internal conditions of desegregated schools, the feasibility of alternative desegregation policies, and the interrelation of school desegregation with other equity issues such as housing and job desegregation. The School Organization program is currently concerned with authority-control structures, task structures, reward systems, and peer group processes in schools. It has produced a large-scale study of the effects of open schools, has developed Student Team Learning instructional processes for teaching various subjects in elementary and secondary schools, and has produced a computerized system for schoolwide attendance monitoring. The School Process and Career Development program is studying transitions from high school to post secondary institutions and the role of schooling in the development of career plans and the actualization of labor market outcomes. The Studies in Delinquency and School Environments program is examining the interaction of school environments, school experiences, and individual characteristics in relation to in-school and later-life delinquency.

This report, prepared by the Studies in Delinquency and School Environments program, discusses the application of social network analysis to examine competing theories of delinquent social structure.

Abstract

The nature of the relationships between delinquent peers takes different forms in different theories of delinquent behavior. This paper argues that these differences have received little formal attention and then elaborates two competing models of delinquent peer relations, the social disability model and the social ability model. Social network analysis is suggested as a method for describing the structure of delinquent peer relations and making rival hypotheses derived from each model explicitly testable. It is emphasized that the hypotheses developed in this paper require a new empirical approach based on the comparative analysis of delinquent and nondelinquent peer relations.

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Liska (1969) has proposed that the best strategy for developing a coherent, comprehensive body of knowledge about delinquency involves simultaneous tests of competing delinquency theories. Hepburn (1977) attempted to directly test competing models of the causes of delinquent behavior, but in general this research strategy has rarely been followed. Consequently, progress in the development of a general theory of delinquent behavior has been slow and difficult.

This paper elaborates two competing models of peer relations among delinquent youth based first on social control and differential association theory, and second, on subcultural theory. Then we derive hypotheses about the structure of delinquent peer relations from each perspective. We also suggest how these hypotheses can be made explicitly testable by using the precise descriptions of peer relational structures provided by network analysis. It is hoped that this effort will open for consideration an area of delinquency research which has received too little attention, and contribute to a general theory of delinquency.[1]

Differential association theory, subcultural theory, and social control theories of delinquency refer to delinquent peer processes without systematically conceptualizing or measuring the structure of delinquent peer relations. The conceptions of peer relations embedded in these theories have been loosely based on case studies and survey data rather than on the rigorous comparative study of the structure of delinquent and nondelinquent peer groups. These theories make assumptions about the structure and content of delinquent peer relations that can be split into two rough categories.[2] First, social control theory assumes that delinquents lack normal social skills and have trouble maintaining long-term, mutually rewarding relationships with others because of poor familial

socialization. Delinquents' relations have been characterized as "cold and brittle" (Hirschi 1969) as a result of their social ineptitude (Short and Strodtbeck 1965; Gordon 1967). In this view, delinquents are also believed to be unable to maintain the well-ordered status hierarchies and complex exchange relationships that are typically found in nondelinquent, conventional groups (cf. Blau 1964; Homans 1974). We refer to this conception of delinquent peer relations as the social disability model.

The second category includes differential association theory (Sutherland and Cressey 1974) and subcultural theory (Cohen 1955; Lerman 1967; Miller 1958; Cloward and Ohlin 1960; Spergel 1964). These theories assume that delinquents have social abilities essentially similar to nondelinquents and are able to maintain the kinds of relational structures found among nondelinquents. Also, delinquent peer groups are assumed to have all of the organizational richness and stability that characterize conventional peer groups. In this view, the key difference between delinquents and nondelinquents is not in the structure or content of their peer relations, but in their divergent socialization histories and in the opportunities and rewards for criminal behavior furnished by their social environments. We refer to this conception of delinquent peer relations as the social ability model.

The Social Disability Model of Delinquent Peer Relations

A number of case studies have documented deficiencies in the social skills of delinquents. Lewis Yablonsky (1963) observed that the youth most susceptible to membership in a violent gang lack the social ability to assume complex, constructive social roles. These individuals are largely devoid of compassion for others and have low needs for affiliation. They have been described as interpersonally immature persons who perceive the

world in simple good-bad dichotomies and in terms of a competitive zero-sum game (Sullivan, Grant and Grant 1957). Because these individuals often feel vulnerable, they defend against fears of exploitation through projection and overt hostility. It has often been noted that delinquents are concerned with personal control of themselves and others and that they tend toward manipulative behavior (Gold and Petronio 1980).

The rudimentary social skills possessed by delinquents enable them to negotiate only a narrow set of street corner milieus (Whyte 1955), and they typically have difficulty adapting to new social situations. Many of these problems have been attributed to the difficulties of growing up in a disorganized social and family milieu (Gordon 1967; Liebow 1967; Short and Strodtbeck 1965). The overt ease and naturalness of these peer relations are not to be equated with a full range of social skills. Although these individuals have not internalized any conventional moral orientation, their self-protective behavior often reveals a remarkable sensitivity to the avoidance of negative sanctions. The highest peer acclaim is reserved not for those delinquents who merely break the law, but for those who are "cool" enough not to get caught.

The social disability model also implies that delinquents are incapable of well organized group behavior because of their basic lack of social skills. Roach and Gursslin (1965) have summarized this line of reasoning succinctly:

> It seems implausible to assume that social actors who have cognitive restrictions, a limited self-system, and a limited role repertory possess the requisite attributes for the elaboration of intricate cultural and social patterns (1965:207).

In this view, leaders of delinquent peer groups emerge in action-oriented criminal behavior or in the search for "kicks," but they tend to be at

the forefront of precipitate events rather than initiators of planned group action. Also, their influence is thought not to extend beyond specific criminal activities and other group members may be respected for their sexual prowess, gambling or other individually oriented street activities (Short and Strodtbeck 1965; Klein 1968). In summary, the social disability model asserts that a low level of individual socialization is responsible for the impoverished social relations and primitive social structures believed to occur in delinquent groups.

The Social Ability Model of Delinquent Peer Relations

The key idea of the social ability model of delinquent peer relations is that the structure and content of delinquent relations are not essentially different from nondelinquent social relations. In this view, delinquent adolescents have sufficient interactional skills to negotiate sophisticated organizational structures, recruit new members, identify and distribute a variety of consensually valued rewards, and maintain relatively stable group identities (Cohen 1955; Cloward and Ohlin 1960; Spergel 1964; Tomson and Fielder 1975), all of which are basic social processes also observed in nondelinquent social groups (Blau 1964; Homans 1974).

In the social ability model delinquents may be as interpersonally mature as nondelinquents and may recognize and respond to others' social needs. They may have conventional concerns about their social appearances, prestige and social status. Routine cooperativeness and friendliness are believed to characterize delinquent social interactions because popularity and social acceptance depend on these traits. Finally, in the social ability view, delinquents are assumed to be just as capable of mastering group roles and exchanging influence and rewards as are nondelinquent youth.

A basic tenet of differential association theory, which implicitly assumes the social ability model of delinquent peer relations, is that groups of delinquents share norms that may be as complex as conventional norms, but which are quite different in content. Sutherland and Cressey (1974) have attempted to describe the transmission of delinquent and criminal values through normal socialization processes. They argued that criminal behavior is learned in social interaction within intimate and cohesive groups, and when the frequency, intensity and duration of these associations exceeds conventional social contacts, delinquent identities and behavior evolve. They concluded that delinquent values and behavior do not originate in individual disabilities or predispositions, but are transmitted from groups with well articulated delinquent norms to appropriately situated conventional youth.

Cohen (1955) has asserted that lower class youth have the highest risk of becoming delinquents. He has noted that schools typically represent middle class values, and that lower class youth often lack the social and intellectual skills needed to compete academically with middle class youth in the classroom. Teachers reward students for studiousness and academic performance, but lower class youth often have not been socialized in terms of these criteria. Thus, the delinquent group emerges as the collective solution to the problems of status acquisition and maintenance in the classroom. Cohen stated that:

> It is only in interaction with those who share his values that the actor finds social validation for his belief and social rewards for his way of life, and the continued existence of the group and the friendly intercourse with its members become values for the actor (1955:59).

Shaw (1930) observed that in neighborhoods which overwhelmingly endorsed criminal norms, stealing was a common practice and was approved by delinquents' parents. Miller (1958) argued that normal parent-child relationships in such neighborhoods resulted in the acquisition by children of delinquent norms. In Shaw and McKay's (1931) description of shoplifting, the behavior of the youth appeared no different than normal play. In this view criminal behavior is conceptualized as a normal outcome of complex social and normative processes in disorganized social areas rather than as a result of the failure of normal social processes.

In summary, normal interpersonal skills are attributed to delinquents in the social ability model which are far more developed than those suggested by the social disability model. These models of delinquent peer relations show a clear and striking conflict in the conceptualization of delinquent peer relations that has not previously been formalized. There is some support for both models in earlier studies, but the existing evidence is unsystematic and indirect. In the following section, we develop empirically testable hypotheses about the detailed structure of delinquent peer groups from the two competing models using social network analysis.

Social Network Analysis and the Peer Relations of Delinquents

A variety of new network techniques have recently been developed (Burt 1978; Holland and Leinhardt 1979; Leinhardt 1977) that allow analyses of delinquent peer structures that are far more systematic and detailed than were possible in earlier case studies or surveys. In network analysis, individuals and their relationships are treated as points and lines on a graph, and computer algorithms allow the empirical detection of peer groups and the tracing of connections among them. These analyses can provide a

description of delinquent peer structures from two person dyads through entire neighborhoods.

A second advantage of network analysis is that because a graph has no intrinsic sociological meaning, the researcher must think carefully about who is influencing whom and exactly what is being transmitted in the social relationship, such as deviant norms and values, friendship, or information about criminal behavior. Thus, these techniques can be used inductively to suggest new hypotheses about peer processes from empirical peer structures (see Brieger and Ennis 1979 for an illustrative example).

Network analysis provides a new vocabulary to characterize the peer relations of delinquents. In the following sections selected dimensions of networks are briefly introduced and used to contrast the social disability and the social ability models of delinquent peer relations.[3] Table 1 displays these dimensions and summarizes the hypotheses derived from the two models along with the characteristics of nondelinquent social relations.[4]

Table 1 About Here

Reciprocity and Stability in Dyads

The smallest possible delinquent group is the two person dyad. The study of dyads is important for the development of a conception of the nature of influence and the processes through which values are transmitted in peer relations. Peer associations in a dyad can take three forms: reciprocated, unreciprocated, and no relation. There is substantial theoretical (Heider 1958; Gouldner 1960) and empirical (Davis and Leinhardt 1973) support for the idea that in normal social intercourse, most important relationships are reciprocated. Furthermore, it has been shown that the

Table 1

Selected Dimensions of Delinquent and

Nondelinquent Peer Relations

Dimensions	Characteristics of Nondelinquent Peer Relations	Social Ability Hypotheses of Delinquent Peer Relations	Social Disability Hypotheses of Delinquent Peer Relations
Reciprocity in and stability of dyads	High	High	Low
Transitivity in triads	High	High	Low
Distribution of status within cliques	Skewed and Hierarchical	Skewed and Hierarchical	Uniform and Undifferentiated
Size and Distinctiveness of cliques	Small and Distinctive	Small and Distinctive	Large and Indistinct
Clique density	High	High	Low
Multiplexity of cliques	High	High	Low
Connections between cliques	Low	Low	High

reciprocated dyads of nondelinquents are more stable and long-lasting than unreciprocated dyads (Epstein 1979; Hallinan 1979).

Because the two delinquency models differ in the social skills attributed to delinquents, they imply different tendencies toward reciprocation in delinquent peer dyads. The social ability model asserts that delinquent social relations resemble normal peer relations while the social disability model predicts lower than normal reciprocation and more instability than occurs in nondelinquent dyads. Consequently, the social ability model implies a greater incidence of reciprocated and stable dyads than the social disability model, controlling for such conditioning variables as total choices made and the size of the pool of potential delinquent friends.

Only one study (Fararo and Sunshine 1964) has compared the reciprocity and stability of delinquent and nondelinquent dyads. They reported greater reciprocity in delinquent dyads than in nondelinquent dyads, but because their interest was more methodological than theoretical, they did not test delinquency theories or report significance tests. Clearly, however, these structural parameters have important implications for testing delinquency theories. For example, if most delinquent dyads were shown to be unreciprocated and unstable, lending support to the social disability model, then it would be unlikely that delinquent values are transmitted and delinquent behavior learned in the manner suggested by differential association and subcultural theorists. The reverse finding would support these theories and raise questions about social control theory.

Transitivity in Triads

Triads represent the next level of complexity in the social organization of peer groups. In the triad, there are 16 possible combinations of recipro-

cated, unreciprocated and null relations. A major difference between these combinations is their transitivity. Given that person A likes B and B likes C, then the triad is transitive if A also likes C and intransitive if A and C dislike each other (Harary, Norman and Cartwright 1965). Davis and Leinhardt (1973) have argued that intransitive triads cause psychological discomfort and are therefore avoided. Evidence that the majority of triads in nondelinquent social groups are transitive supports this general view (Holland and Leinhardt 1978), although intransitive relationships may serve many important functions in large networks (Anderson 1979; Granovetter 1979).

The third person in a triad differentiates it from the dyad in one important sociological sense. Reciprocated choices tend to be made between persons of the same status rank and tend to form clusters of friends. Choices between status levels tend to be unreciprocated and go from lower to higher status individuals, contributing to a status ordering of clusters or cliques (Blau 1964; Davis 1977; Homans 1974). Thus, if A and B like each other and both like C, but C does not reciprocate, the triad is still transitive and may indicate C's higher status. In this view, triads are the elementary building blocks of status hierarchies in larger social organizations such as delinquent gangs and nondelinquent peer groups.

There are differences in the transitivity of delinquent triads predicted by the social ability and social disability models that again depend on the degree of normalcy assumed to underlie delinquent peer relations. According to the social ability model, delinquents' triads are expected to be transitive, reflecting the consistency among relations in stable, reciprocated relationships and well-developed status hierarchies. The degree of transitivity would not be expected to differ from the transitivity of

triads in nondelinquent peer groups. In contrast, the social disability model suggests that many delinquent triads would be intransitive and contain inconsistent sets of relations.[5]

Distribution of Status within Cliques

The distribution of sociometric choices received by individuals in a nondelinquent peer clique reflects their relative status (Homans 1974). The high status person is better able to reward others in the form of leadership, association, status, self-esteem or anything else of subjective value in the peer clique. Greater skewness in the distribution of choices received indicates greater consensus about the value of particular members and greater discrepancies in the abilities of clique members to provide desired rewards. The greater the group consensus is about the criteria for individual status, the more skewed and hierarchical will be the clique's distribution of status.

The social ability model leads to the hypothesis that delinquent cliques will have the same kind of well-developed status hierarchies as nondelinquent cliques, although they will be based on shared delinquent norms rather than conventional norms (Cohen 1955; Spergel 1964; Cloward and Ohlin 1960). In contrast, the social disability model emphasizes the evanescent, shifting quality of delinquent peer relations. In this view delinquents are believed to lack the maturity and interpersonal skills needed to manage complex hierarchical relations (Gordon 1966). They would not develop a strong consensus about the most valuable members of their cliques and the distribution of status would be relatively uniform. Although there would be some status differences among members, they would not be as great as those found in nondelinquent peer cliques.

If the social ability model of delinquent peer relations is correct, we would expect a few individuals of high status in delinquent cliques, with a majority of others receiving some, but fewer, sociometric nominations. We would also expect to find few isolates because of the presumed ability of delinquent groups to recruit members and satisfy collective needs. If, however, the social disability model is correct, the lack of a normative consensus would prevent any one individual from becoming a consensually supported, permanent leader in delinquent cliques. Temporary leaders would emerge in action oriented contexts but would not have the general authority typical of leaders in nondelinquent cliques. Also, the social disability model suggests that delinquents with particularly poor interpersonal skills would be more numerous than in a nondelinquent clique and would have a greater tendency to be isolated from others and receive no sociometric choices.

Once the status hierarchy has been charted in terms of the distribution of choices received, then the characteristics of high and low status individuals can be examined to determine the criteria for status in a particular delinquent network. Breiger and Ennis (1979) have illustrated how the empirical structure of sociometric choices in a group can help validate a model of small group interaction. The same general method could be used to test models of delinquent peer structure and more general delinquency theories. The social ability model states that delinquent cliques have well developed normative systems and clear criteria of status such as criminal knowledge and skills. The characteristics of high status members should reveal these criteria, while low status members would lack the status-conferring characteristics. The social disability model states that status

in delinquent cliques is distributed much more randomly. In this view, high and low status members would not be expected to have consistently different characteristics over a long period of time.

Size and Distribution of Cliques

Traditionally, delinquency researchers have discussed delinquent "groups" and "cliques" without carefully defining their uses of these terms. This conceptual ambiguity actually reflects two separate difficulties in clique detection. The first problem is the extreme difficulty of locating and identifying delinquent peer groups and collecting complete data from them, particularly among the most deviant and inaccessible delinquents. Even researchers who have focused on relatively well-known neighborhood gangs have noted the difficulties of determining group membership (e.g., Short and Strodtbeck 1965). This problem has been especially acute in the study of loosely organized delinquent peer groups with indistinct social boundaries. Even the most sophisticated analysis of group structure may yield artifactual results if real group members have not been reached in the process of collecting data. There is no easy solution to this problem.

The second problem in clique analysis is analytical and is more amenable to solution. There has recently been rapid progress in the development of computer algorithms for identifying cliques from raw choice data.[6] These algorithms use an arbitrary relational criterion or cluster value to determine the empirical boundaries of cliques. The setting of clique boundaries, however, involves an implicit trade-off between clique size and discriminability, which are generally inversely related. Breaking a population of known size into a few large cliques makes it easy to

trace relations among them, but hard to discriminate between cliques on the basis of identifying characteristics such as delinquent norms and behavior, because of high heterogeneity within cliques. A cluster solution yielding many small cliques makes it easier to discriminate among cliques but more difficult to trace relations between them. In practice, clique boundaries are typically set by trial and error to maximize clique size and discriminability in terms of theoretically important dimensions.[7]

It would be informative to systematically vary clique boundaries in comparing delinquent and nondelinquent groups because the two models of delinquent peer relations make different predictions about the size and distinctiveness of delinquent cliques. The social ability model suggests that because members have a well-developed group identity, their cliques would have definite boundaries and be relatively discriminable. In terms of a cluster analysis histogram, these cliques would be expected to have low within-clique "social distance" (McFarland and Brown 1973) values and high between-clique social distances. In contrast, the social disability model suggests that cliques have less clear and more changeable boundaries. In this view, clique members would have relatively high social distances among themselves and only slightly higher social distances to persons outside their clique. These hypotheses can be tested by comparing social distances within and between cliques and by contrasting estimates of the discriminability of delinquent and nondelinquent cliques obtained through discriminant analysis, controlling for average clique sizes.

The models of delinquent peer relations also lead to competing hypotheses about delinquent and nondelinquent clique sizes. The social ability model suggests that members of delinquent cliques are as cohesive as mem-

bers of nondelinquent cliques, implying small to moderate clique sizes. By contrast, the social disability model implies that delinquent groups are relatively large with loose, poorly defined clique boundaries, and many peripheral or part-time members with relatively weak and superficial relationships with each other. The average sizes of delinquent and nondelinquent peer groups could be compared, controlling for clique discriminability and average within-clique social distances.

Density Within Cliques

The intuitive appeal of the term "cohesiveness" has supported its wide currency in social psychology despite its lack of unambiguous definition. The network analogue of cohesiveness is the precise term "density." The proportion of possible relations within a clique that actually occur is referred to as its density (Mitchell 1969). The social disability model suggests low densities of relations in delinquent cliques because of the limited social skills attributed to delinquents. Clearly, it takes greater interpersonal ability to manage relations in a densely connected clique than in a clique with few interconnections. In contrast, the normal social skills and affiliative interests attributed to delinquents under the social ability model leads to the prediction of average clique densities compared to nondelinquent cliques.

Multiplexity

The term "multiplexity" (Gluckman 1955) refers to relationships that involve multiple roles and purposes. For example, two delinquents who are simultaneously siblings, members of the same gang, and co-workers have a multiplex relationship. Mitchell (1979) has hypothesized that the more multiplex relationships there are within a social group, the greater the

tendency toward increased density. Conversely, if most relationships within a group have only one function, the density of these relationships is expected to remain constant or decrease.

The two models of delinquent peer relations lead to competing predictions consistent with the hypotheses about density. According to the social ability model, both delinquent and nondelinquent groups will have a dense pattern of relationships within their cliques, which will also be multiplex and involve several roles or functions. The social disability model, on the other hand, suggests that delinquents will have lower relational densities. We would also expect their relationships to be relatively compartmentalized and single-stranded rather than multiplex. Multiplex relationships encourage the development of general normative orientations which tend to be abstracted out of multiple behavioral contexts. Single-stranded relationships remain focused on concrete and narrow functions and would discourage the formation of well-developed delinquent norms. Thus, for example, the occurrence of a large proportion of single-stranded relationships among delinquents in contrast to nondelinquents would provide evidence for the social disability model and against the social ability model. A large proportion of multiplex relationships would support the social ability model.

Connections between Delinquent Cliques

The two delinquency models have implications for the relative isolation of delinquent groups from each other and from nondelinquent groups. Granovetter's (1973) distinction between strong and weak relations is relevant here. Compared to weak relations, strong relations take more time, involve more emotional intensity and intimacy, and require more reciprocal

exchanges of services. Reciprocated choices are strong relations, while weak relations are often unreciprocated. Relations within nondelinquent groups tend to be strong, while relations between groups, called bridges, are necessarily weak. Granovetter showed how the existence of bridges facilitates communication between groups and pointed out the paradox that relational choice densities within and between groups are inversely related. The more weak relations there are in a network, the greater the density of relations there are between cliques. The fewer weak relations there are, the greater is the tendency for tight, dense, but mutually isolated cliques.

The social ability model suggests that delinquent cliques would have high within-group choice densities based on a large proportion of strong choices, with few weak relations and bridges to other cliques. In this view, delinquent cliques would be expected to be relatively autonomous and isolated from one another, exchanging few members, information or support. These cliques would also be isolated from nondelinquent groups, and therefore be relatively inaccessible to influences from outside community groups and authorities.

The social disability model suggests that delinquent groups are much less tightly organized, with a higher proportion of weak choices. Therefore these cliques would be relatively non-exclusive, and new members would be readily assimilated without immediately being required to adopt the group's rather poorly defined delinquent orientation. We would expect a lot of overlap between delinquent cliques because of the interconnections provided by the many weak choices. We would also expect the high proportion of weak choices to provide connections between delinquent and non-

nondelinquent groups, although the mere existence of these weak choices would not necessarily guarantee that these delinquent peer groups would be amenable to nondelinquent influences.

Research Agenda

A secondary purpose of this paper has been to phrase questions about delinquent relations in such a way that they require a fresh empirical approach. With few exceptions, the hypotheses advanced in this paper cannot be tested with existing data on delinquent peer relations. The traditional approach of asking delinquents to report a limited number of friendship choices does not permit a thorough analysis of peer group structures (Hallinan 1974; Holland and Leinhardt 1973). We suggest that more detailed information be collected about peer relations of delinquents and nondelinquents. All individuals included in a sample should be given the opportunity to indicate their sentiments toward every other individual in terms of multiple sociometric criteria such as friendship, enmity, delinquent and nondelinquent influences and work or leisure time associations. This procedure will provide the data for a network analysis and test of the hypotheses presented in this paper.

There are many empirical issues that will have to be addressed in the kind of research suggested here. A detailed discussion of these issues is beyond the scope of this paper but three will be mentioned briefly. First, the kind of data collected on delinquents partly depends on the definition of delinquency used (see footnote 1). Incarcerated felons constitute a markedly different sample than teenagers who drink beer and joyride, and their peer groups may have very different structures. There is also variation in the peer structure of nondelinquents

depending on the specific characteristics of the population sampled (Frank 1978). This problem can become a useful focus of study. Appropriate data will allow the peer structures of a variety of types of delinquents and nondelinquents to be compared.

A second major problem that confronts research on peer structures is the delimitation of appropriate network boundaries (Barnes 1969; Mitchell 1969). In practice it is impossible to include all of even one person's associates in a sample and it becomes necessary to set arbitrary boundaries bases on sample size or geographical or sampling convenience. This problem is particularly acute in delinquency research because of the relative scarcity of delinquents in random samples. Much more research on the boundary problem needs to be done.

Finally, a third issue is the specification and testing of causal models of delinquent socialization involving peer relational processes. In subcultural and differential association theories, relations with delinquent peers are thought to precede the acquisition of delinquent values and definitions (cf. Hepburn 1977). In contrast, social control theory states that youth acquire deviant norms and values through inadequate familial socialization and then commit delinquent acts and make friends with delinquents. However, Nesselroade and Baltes (1979) note that cross-sectional data render tests of the causal ordering of developmental variables ambiguous. Instead, longitudinal studies of peer friendship structures in delinquent and nondelinquent groups are necessary to thoroughly test causal models of peer processes. Moreover, given the large or irregular periods of time between individual delinquent acts, the scheduling of appropriate lag times for the collection of longitudinal data becomes crucial. Longitudinal data

per se may not be sufficient to allow the separation of socialization effects from cohort effects and historical effects, and may not provide an unambiguous test of competing causal models (Adam, 1978).

We suggest that these problems be addressed, and the hypotheses advanced in this paper be investigated in several phases of research. Each phase would progressively refine the hypotheses, and provide information about the seriousness of boundary and definitional problems, and the generalizability of the results. The goal of the first phase would be to analyze the peer relations of a physically bounded network such as a public high school and compare the rates of various kinds of delinquency reported by students in different peer structures. This study would necessarily limit the definition of delinquent behavior to relatively minor offenses. It would also constrict the boundary of peer networks to the school. In actuality, delinquents might associate with peers who do not go to their school, and the most serious delinquents might be out of the public school system altogether.

In the second phase, peer structures within identified delinquent milieus could be compared with structures in comparable nondelinquent environments. Ecological settings such as schools with serious delinquency problems, neighborhoods with high crime rates and therapeutic milieus could be selected, recognizing the limited generalizability of the results from these arbitrarily bounded networks. Although the results of this study would again depend on the definitions of delinquency used, they would provide a comparison of the peer structures of nondelinquents and extreme delinquents.

Additional phases of research would attempt to extend the generalizability of results by studying the delinquency and peer relations of adolescents in an entire community or population at several points in time.

Actors in a network could be sampled, with known and self-reported delinquents overrepresented, and the structure of their personal networks could be examined. Sampling techniques for this kind of study are currently under development (cf. Frank 1978).

This research agenda outlines some initial, exploratory steps for the comparison of delinquent and nondelinquent peer relations and for probing the empirical consequences of various network boundaries and definitions of delinquency. These data will provide new knowledge about the associational processes and structural relations of delinquent youth.

Summary and Conclusion

The purpose of this paper has been to develop general hypotheses about the social relations of delinquents from social ability and social disability models of delinquent peer relations. A key difference between these models is the assumption of normal social relations among delinquents in the social ability model in contrast to the social ineptitude and lack of social skills attributed to delinquents under the social disability model.

From these competing premises, we derived hypotheses about delinquent social relations on a number of selected dimensions of network structure. Based on the social ability model, delinquents are expected to have a large proportion of stable, reciprocated choice dyads, high transitivity in triads, and small, distinctive cliques with well defined boundaries. Furthermore, there should be clear status hierarchies in these cliques with discernible leaders and relatively few isolates. Finally, the social ability model suggests that delinquent cliques would be relatively isolated and inaccessible to outside, nondelinquent influences.

The social disability model postulates that delinquents lack the interpersonal skills needed to maintain stable, reciprocated relationships. Under this model, delinquents would be expected to have a series of relatively transient, and unreciprocated, relationships. They would be incapable of managing the complex exchange relations necessary to maintain stable cliques. As a consequence, delinquent cliques would tend to be large and indistinct. They would have ambiguous status hierarchies. Leaders would change often, they would not be very powerful, and their influence may be limited to specific action contexts.

These models have been developed as ideal types stated in the most general terms, and will require qualification and refinement as they are applied to specific empirical cases. Moreover, in tracing out the implications of these models, we have attempted to illustrate selected and extreme differences rather than present an exhaustive analysis. Actual delinquent groups may exhibit some variations of the peer structures discussed here, and external influences may modify actual delinquent peer structures.

In conclusion, the intent of this paper has been heuristic, to show that there are important theoretical implications of social ability and social disability models of the structure of delinquent peer relations, an area too long neglected in delinquency research. Also, we suggested new empirical approaches to the study of delinquent peer relations. Detailed knowledge about delinquent relational structures is a prerequisite to understanding how delinquent values are learned and transmitted and is therefore fundamental to delinquency theory and research. It is hoped that the information resulting from a comparative investigation of delinquent and nondelinquent peer relations will help develop and test a general theory of delinquency.

Footnotes

1. We recognize that the definition of delinquency poses difficult conceptual and empirical problems which have crucial implications for the topic under discussion here. For example, in a legal sense, a delinquent is a youth who has violated the criminal or juvenile codes, who has been processed through a set of legal procedures, and given the adjudicated delinquent label. Yet the judicial process is quite complex, and legal and extra-legal criteria influence each stage of a criminal proceeding (Chiricos and Waldo 1975). Consequently, delinquents so defined are not representative of all youth who commit crimes.

   Definitions of delinquency based on self-reported delinquent behavior have been used to avoid the issue of discretion in the legal process (Elliot and Voss 1974; Hirschi 1969). However, the reliability and validity of these measures have been questioned (Elliot and Ageton 1979). Self-report scales typically suffer from a limited range of the seriousness of offenses (Hindelang, Hindelang, and Weiss 1978). Either a large proportion of youth are defined as delinquent for having committed innocuous offenses or very few adolescents are defined as delinquent for having committed serious crimes.

   The definition of delinquency selected for use would affect the analysis of peer relational structures in several ways. First, the more serious the offense required for an adolescent to be defined as delinquent, the smaller would be the number of delinquent peer groups obtained. Secondly, the more serious the basis of the delinquent definition, the greater the potential differences between the structure of delinquent and nondelinquent peer groups. Finally, delinquents defined

in terms of specific crimes such as drug use, theft or organized criminal activities may be quite different subsets of individuals (Cloward and Ohlin 1960; Haskell and Yablonsky 1978) and have different peer structures.

2. We do not intend to suggest that there are not substantial and complex differences among delinquency theories. We do wish to point out that several of the theories share implicit assumptions about delinquent peer relations.

3. The dimensions selected for discussion certainly do not exhaust the dimensions of network structure relevant to the study of delinquent peer relations, but do represent a variety of levels of aggregation of network structures. Also, they are dimensions on which the competing models clearly differ.

4. We present these models in simplified, "pure" form for the sake of theoretical clarity. Empirical tests of the competing models may show that actual delinquent groups have some characteristics of each of the pure models.

5. The dimensions of network structure discussed in this paper are obviously interrelated. For example, transitivity is a function of both reciprocity in dyads and the total number of choices made and received (Holland and Leinhardt 1979). At first glance, it would seem necessary to control for lower-order structures in the analysis of more complex structures. However, the decision to control for these variables is not automatic, and involves implicit theoretical assumptions (Granovetter 1979) the discussion of which are beyond the scope of this paper. Therefore, dimensions of network structure are discussed in this paper as if they were relatively independent. Individual investigators will

have to decide what, if any, controls are necessary to answer their specific research questions.

6. There are two main strategies for detecting cliques in social choice data, which Burt (1978) has called relational and positional techniques. Very briefly, relational techniques identify cliques according to the density of relations between members. Individuals who cluster together on the basis of direct relationships or through friends, or friends of friends, constitute a clique or "social circle" (Alba and Moore 1978). The positional strategy identifies cliques on the basis of the similarity of individuals' relations to others in the network. Individuals assigned to the same clique are not necessarily directly related, but do occupy "functionally equivalent" (White, Boorman, and Brieger 1976) roles in the network.

7. In principle, it ought to be possible to derive a way to calculate optimum clique size and discriminability, but this begs the question of which criteria the optimum should represent. This is a general issue in clique detection which needs further attention.

References

Adam, J. 1978. "Sequential Strategies and the Separation of Age, Cohort, and Time-of-Measurement Contributions to Developmental Data." Psychological Bulletin 85: 1309-1316.

Alba, R. D. and C. Moore. 1978. "Elite Social Circles." Sociological Methods and Research 7: 167-188.

Anderson, B. 1979. "Cognitive Balance Theory and Social Network Analysis: Remarks on Some Fundamental Theoretical Matters." In Perspectives on Social Network Research, edited by Paul W. Holland and Samuel Leinhardt. New York: Academic Press.

Barnes, J. A. 1969. "Networks and Political Process." In Social Networks in Urban Situations, edited by J. Clyde Mitchell. Manchester: University of Manchester Press.

Blau, P. M. 1964. Exchange and Power in Social Live. New York: Wiley.

Breiger, R. L. and J. G. Ennis. 1979. "Personal and Social Roles: The Network Structure of Personality Types in Small Groups." Social Psychology Quarterly 42: 262-270.

Burt, R. S. 1978. "Cohesion Versus Structural Equivalence as a Basis for Network Subgroups." Sociological Methods and Research 7: 189-212.

Chiricos, T. and G. P. Waldo. 1975. "Socioeconomic Status and Criminal Sentencing: An Empirical Assessment of a Conflict Proposition." American Sociological Review 40: 753-772.

Cloward, R. and L. E. Ohlin. 1960. Delinquency and Opportunity: A Theory of Delinquent Gangs. New York: Free Press.

Cohen, A. K. 1955. Delinquent Boys. New York: The Free Press.

Davis, J. 1977. "Clustering and Structural Balance in Graphs." In Social Networks, edited by S. Leinhardt. New York: Academic Press.

Davis, J. and S. Leinhardt. 1973. "The Structure of Positive Interpersonal Relations in Small Groups." In Sociological Theories in Progress, edited by J. Berger et al. Boston: Houghton Mifflin.

Elliot, D. S. and H. Voss. 1974. Delinquency and Dropout. Lexington, Mass.: D.C. Heath.

Elliot, D. S. and S. S. Ageton. 1979. "Reconciling Race and Class Differences in Self-Reported and Official Estimates of Delinquency." Boulder, Colorado: Behavioral Research Institute.

Epstein, J. 1978. "Friends in School: Patterns of Selection and Influence in Secondary Schools." Baltimore: The Johns Hopkins University Center for Social Organization of Schools Report No. 266.

Fararo, T. J. and M. H. Sunshine. 1964. A Study of a Biased Friendship Net. Syracuse: Syracuse University Youth Development Center.

Frank, O. 1978. "Sampling and Estimation in Large Social Networks." Social Networks 1: 97-101.

Gluckman, M. 1967. The Judicial Process Among the Barotse of Northern Rhodesia (2nd ed.). Manchester: Manchester University Press.

Gold, M. and R. J. Petronio. 1980. "Delinquent Behavior in Adolescence." In Handbook of Adolescent Psychology, edited by J. Adelson. New York: John Wiley.

Gordon, R. A. 1967. "Social Level, Social Disability, and Gang Interaction." American Journal of Sociology 73: 42-62.

Gouldner, J. 1960. "The Norm of Reciprocity: A Preliminary Statement." American Sociological Review 25: 1-179.

Granovetter, M. 1973. "The Strength of Weak Ties." American Journal of Sociology 78: 1360-1380.

Granovetter, M. 1979. "The Theory Gap in Social Network Analysis." In Perspectives on Social Network Research, edited by Paul W. Holland and Samuel Leinhardt. New York: Academic Press.

Hallinan, M. T. 1974. The Structure of Positive Sentiment. New York: Elsevier.

Hallinan, M. 1979. "Children's Friendships and Cliques." Social Psychology Quarterly 42: 43-54.

Harary, F., R. Z. Norman and D. Cartwright. 1965. Structural Models. New York: John Wiley.

Haskell, M. R. and L. Yablonsky. 1978. Juvenile Delinquency. Chicago: Rand McNally.

Heider, F. 1958. The Psychology of Interpersonal Relations. New York: Wiley.

Hepburn, J. R. 1977. "Testing Alternative Models of Delinquency Causation." Journal of Criminal Law and Criminology 67: 450-460.

Hindelang, M. J., T. Hirschi, and J. G. Weis. 1979. "Correlates of Delinquency: The Illusion of Discrepancy Between Self-Report and Official Measures." American Sociology Review 44: 995-1014.

Hirschi, T. 1969. Causes of Delinquency. Berkeley: University of California Press.

Holland, P. W. and S. Leinhardt. 1978. "An Omnibus Test for Social Structure Using Triads." Sociological Methods and Research 7: 227-256.

Holland, P. W. and S. Leinhardt. 1973. "The Structural Implications of Measurement Error in Sociometry." Journal of Mathematical Sociology 3: 85-111.

Holland, P. W. and S. Leinhardt, eds. 1979. Perspectives on Social Network Research. New York: Academic Press.

Homans, G. C. 1974. Social Behavior. New York: Harcourt, Brace, Jovanovich.

Klein, M. 1968. "Impressions of Juvenile Gang Members." Adolescence 3 (Spring): 53-76.

Leinhardt, S., ed. 1977. Social Networks. New York: Academic Press.

Liebow, E. 1967. Talley's Corner. Boston: Little, Brown.

Lerman, P. 1967. "Gangs, Networks and Subcultural Delinquency." American Journal of Sociology 73: 63-72.

Liska, Allen. 1969. "Interpreting the Causal Structure of Differential Association Theory." Social Problems 16: 485-492.

McFarland, D. D. and D. J. Brown. 1973. "Social Distance as a Metric: A Systematic Introduction to Smallest Space Analysis." In Bonds of Pluralism, by E. O. Laumann. New York: John Wiley.

Miller, W. 1958. "Lower Class Culture as a Generating Milieu of Gang Delinquency." Journal of Social Issues 14: 5-19.

Mitchell, J. C., ed. 1969. Social Networks in Urban Situations. Manchester, England: University of Manchester Press.

Mitchell, J. C. 1979. "Networks. Algorithms and Analysis." In Perspectives on Social Network Research, edited by P. W. Holland and S. Leinhardt. New York: Academic Press.

Nesselroade, J. R. and P. B. Baltes, eds. 1979. Longitudinal Research in the Study of Behavior and Development. New York: Academic Press.

Roach, J. L. and O. R. Gursslin. 1965. "The Lower Class Status Frustration, and Social Disorganization." Social Forces 43: 501-510.

Shaw, C. R. 1930. The Jack-Roller. Chicago: University of Chicago Press.

Shaw, C. R. and H. D. McKay. 1931. "Social Factors in Juvenile Delinquency." In Report on the Causes of Crime, National Commission of Law Observance and Envorcement Report No. 12. Washington, D.C.: U. S. Government Printing Office.

Short, J. F. and F. L. Strodtbeck. 1965. Group Process and Gang Delinquency. Chicago: University of Chicago Press.

Spergel, I. 1964. Racketsville, Slumtown, Haulberg: An Exploratory Study of Delinquent Subculture. Chicago: University of Chicago Press.

Sullivan, C., M. Q. Grant and J. D. Grant. 1957. "The Development of Interpersonal Maturity: Applications to Delinquency." Psychiatry 20: 373-385.

Sutherland, E. H. and D. R. Cressey. 1974. Criminology. Philadelphia: Lippincott.

Tomson, B. and E. R. Fielder. 1975. "Gangs: A Response to the Urban world." In Gang Delinquency, edited by B. Tomson and Edna R. Fielder. Monterey, California: Brooks/Cole, 1975.

White, H., S. Boorman and R. Breiger. 1976. "Social Structure From Multiple Networks, I: Block Models of Roles and Positions." American Journal of Sociology 81: 730-779.

Whyte, W. F. 1955. Street Corner Society. Chicago: University of Chicago Press.

Yablonsky, L. 1963. The Violent Gang. New York: MacMillan.

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