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ABSTRACT

Edwin Sutherland's differential association theory was posited to explain all types of criminal or delinquent behavior. While research efforts have generally been confined to a focus on general criminal or delinquent behavior of the individual, it appears that the theory may also be applied to specific criminal or delinquent acts such as marijuana use by the individual. A causal path model based upon Sutherland's theory was developed and operationalized with this emphasis. Two distinct processes of differential association (differential action association and differential attitude association) were suggested to explain the genesis of marijuana use for the individual. The data tended to lend support to the causal path model based upon Sutherland's theory of differential association. References and tables are included. (Author)

# DIFFERENTIAL ASSOCIATION AND MARIJUANA USE

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Edwin Sutherland's differential association theory was posited to explain all types of criminal or delinquent behavior. While research efforts have generally been confined to a focus on general criminal or delinquent behavior of the individual, it appears that the theory may also be applied to specific criminal or delinquent acts such as marijuana use by the individual. A causal path model based upon Sutherland's theory was developed and operationalized with this emphasis. Two distinct processes of differential association (differential action association and differential attitude association) were suggested to explain the genesis of marijuana use for the individual. The data tended to lend support to the causal path model based upon Sutherland's theory of differential association.

## DIFFERENTIAL ASSOCIATION AND MARIJUANA USE

Edwin Sutherland's theory of differential association (see Sutherland and Cressey, 1970:75-77) was posited to explain all types of criminal behavior. Although the theory has often been criticized for its problems of operationalization (see Short, 1960 and Glaser, 1956), it has found theoretical application to many types of criminal and delinquent behavior (see Cressey, 1952, 1955 and 1960; Short, 1957 and Voss, 1964). While research efforts have generally focused on the general criminal or delinquent orientations of the individual, it appears that the theory may also be applied to specific criminal or delinquent acts such as marijuana use by the individual. Since the theory had not been tested with this emphasis, it was necessary to reformulate the theory before proceeding with the research.

Several reformulations and strategies for testing Sutherland's theory (Glaser, 1956; Jeffery, 1965; Burgess and Akers, 1966; and De Fleur and Quinney, 1966) were reviewed. Of these strategies, the effort by De Fleur and Quinney appeared to offer the greatest promise as an initial step toward empirically testing Sutherland's theory for specific criminal or delinquent acts. After an analysis of the nine assertions formally stated by Sutherland, De Fleur and Quinney were able to demonstrate that only five were essential to the basic theory. The generalizations which

remained after their reformulation formed a composite set theory model. As a result of their analysis, De Fleur and Quinney (1966:7) identified six prior conditions for criminal behavior and summarized these conditions in the following statement:

> Overt criminal behavior has as its necessary and sufficient conditions a set of criminal motivations, attitudes and techniques, the learning of which takes place when there is exposure to criminal norms in excess of exposure to corresponding anticriminal norms during symbolic interaction in primary groups.

An examination of these prior conditions and the discussion preceeding them suggests that the process of becoming delinquent or criminal involves two stages. In the first stage, the individual perceives and internalizes dispositions toward delinquent or criminal behavior when he is exposed to an excess of definitions favorable to such behavior through symbolic interaction with members of his primary groups. In the second stage of the process, his definitions favorable to criminal or delinquent behavior result in such behavior.

The differential association process as interpreted by De Fleur and Quinney (1966) required the internalization of definitions favorable to delinquent or criminal behavior which were learned from the primary groups, and this became a prior condition for delinquent behavior by the individual.

In order to make this interpretation, an adjustment of Sutherland's sixth proposition ("A person becomes delinquent because of an excess of definitions favorable to violation of law over definitions unfavorable to violation of law.") was necessary to include internalization (De Fleur and Quinney, 1966:7). We believe, however, that Sutherland did not specify internalization of definitions because, while internalization of definitions may facilitate the genesis of criminal or delinquent behavior, such internalization is not necessary. In fact, Sutherland (1941:51) stated that "mere exposition to patterns of criminal behavior does automatically result in criminal behavior provided the person is physically able to practice criminal behavior and provided this exposition is long continued and consistent." This early statement of Sutherland's is consistent with his revised formulation of the theory in which he specified two channels of communication for criminal definitions, "verbal" communication and "communication of gestures" (Sutherland and Cressey, 1970:75). These communications channels provide attitudinal definitions in the verbal channel (known by what individuals say) and action definitions (known by what people do) in the gestures channel and, further, suggest that differential association may involve more than one process.

Differential association may involve attitude definitions from the primary groups which predispose the individual to delinquent action. The tendency to delinquent action may

result from internalization of favorable attitudes (De Fleur and Quinney, 1966:7) or from pressures to show outward signs of conformity to primary group definitions even though favorable definitions have not been internalized. Differential association may also involve action definitions or exposition to delinquent behavior without internalization (Sutherland 1941:51). Earlier research (see Griffin, 1972) has indicated that internalization of action definitions does not make a significant contribution to the explanation of delinquent behavior, indicating that the individual does not internalize action definitions. The genesis of criminal or delinquent benavior results, then, from either of two process of differential association: differential attitude association or differential action association as shown in Figure 1. The concepts included in the processes of differential association were primary group attitude definitions, primary group action definitions, individual definitions and individual delinquent action; however, these concepts may be more clearly delineated and propositions specified to yield a complex causal path model specific to individual marijuana use.

(Figure 1 about here)

## Causal Framework

Earlier research has focused upon peer group acts as an avenue through which the individual assesses primary group definitions, but this and other avenues may be more precisely delineated. Although peer group acts provided an indication of peer action definitions through the communication of gestures, other primary group definitions must be considered. Primary group attitude definitions may also be verbally or otherwise communicated to the individual through symbolic interaction with members of primary groups such as the peer group and the family. The peer group is a primary defining group, but the family as Thomas points out (Truzzi, 1971:277) is the "primary defining agency." Thus primary group attitude definitions must include those of both the parental group and the peer group.

Primary group action definitions are, primarily, attitudes communicated by means of gestures or actions within the peer group. Action definitions of the parental group might also be considered; however, since these acts are defined within a different framework than those acts of the peer group and the individual juvenile (criminal v. delinquent) they may not be considered relevant to the commission of a specific delinquent act such as marijuana use. Primary group definitions, then, has as its complement parental attitude definitions, peer attitude definitions

and peer action definitions. Parental and peer attitude definitions are related to individual delinquent action (marijuana use) either directly or indirectly through individual definitions while peer action definitions relate directly to delinquent action as shown in Figure 1. While these are the most apparent relationships, other propositions may be derived from the general model (Figure 1). Because the individual peer group member is subject to the same processes of differential association, the relationships between parental attitude definitions and peer attitude definitions as well as the relationship between peer attitude definitions and peer action definitions are considered relevant because of their modifying effects on individual definitions and individual delinquent action (marijuana use). The network of causal relationships suggested by the general model may be diagrammed to yield the causal path model shown in Figure 2. All "attitude definitions" in the diagram refer to evaluations of the legal code as unfavorable to violation of marijuana laws and all references to "action definitions" and "delinquent action" in the diagram refer to incidence of marijuana use. The concepts which appear in the causal path model were operationalized and research was implemented to test the causal relationships specified in the path model.

(Figure 2 about here)

## Methodology

The research is based upon data from mailed questionnaires from a random sample of 147 university sophomores listed in the student directory as enrolled in a small, private university in the midwest in the fall, 1971. An analysis of these data indicated that the respondents were primarily white, unmarried sophomores with a modal age of 19. The large majority of the respondents were from middle and upper class backgrounds as measured by Hollingshead's (1957) Two Factor Index of Social Position. Self-report techniques were used to obtain data for all variables specified by the causal path model. It is believed that perceived definitions and acts of others are to be preferred over "actual" definitions and acts since they define the social reality upon which the individual acts. As Thomas (Timasheff, 1967:153) points out, "if men define situations as real they are real in their consequences." The decision to include particular primary group members was based upon Sutherland's specifications of priority, duration, intensity and frequency of relationship with the individual respondent (see Wright and Griffin, 1972). Best friend, longest friend, most frequent companion and parental generation were selected.

One item was used to measure each concept in the model. While twenty-seven (27) items were built into the questionnaire to measure aspects of delinquency only one for each

concept refered specifically to the use of marijuana. Only those items relating specifically to marijuana use, therefore, were included in this analysis. Only very limited scaling of the variables was possible as a result of single indicators for each of the concepts.

The scoring procedures utilized for the research were of two types. The first type was a Likert-type scoring method. Utilizing this scoring technique to measure definitions, the response framework required an assessment as to whether the act is or is not serious and the degree to which the assessment is held. The second type of scoring procedure was based on the frequency of commission of specified delinquent acts. Utilizing a numeric scoring technique, the response framework required an assessment of the frequency of commission.

## Findings

A preliminary analysis of the variables was accomplished through the examination of zero-order correlations (see Table 1). The intercorrelations should be low except where there is a causal relationship. This criterion, in the empirical arena, was difficult to evaluate especially when variables indirectly cause individual delinquent actions.

(Table 1 about here)

Furthermore, the focus of the research is upon a theoretical causal path model, and the intercorrelations may obscure some relationships. The range of intercorrelations, however, was from -.60 to .82.

The Path Model

The path diagram (see Figure 2) represented the theoretical causal model. Path analysis techniques (Wright, 1923 and Duncan, 1966) were utilized with unidirectional arrows to represent direct causal relationships among the variables. Exogeneous variables were those caused by factors outside the theoretical system. $X_1$ was exogeneous while $X_2$, $X_3$, $X_4$ and $X_5$ were endogeneous.

One recursive regression equation was written to represent paths to each dependent variable in the model. The recursive equations mathematically describe the causal path model shown in Figure 2. The equations are as follows:

$$X_2 = b_{2.1}X_1 + e_2$$

$$X_3 = b_{3.2}X_2 + e_3$$

$$X_4 = b_{4.1}X_1 + b_{4.2}X_2 + e_4$$

$$X_5 = b_{5.1}X_1 + b_{5.2}X_2 + b_{5.3}X_3 + b_{5.4}X_4 + e_5$$

The partial and standardized regression coefficients were computed for each equation. An "F" test of significance at the .05 level was used to evaluate each regression coefficient. These values are reported in Table 2. All

hypothesized causal relationships were retained and the standardized path coefficients were entered as path coefficients on the diagram in Figure 3.

(Table 2 about here)

Duncan (1966:7) ...d that all non-significant causal relationships be deleted and the regression process repeated until only statistically and substantively significant relationships were retained. These additional procedures and modifications were not necessary since the initial regression analysis resulted in a statistically and, we believe, substantively significant causal path model which utilizes the propositions posited in the theoretical model.

In order to assess the usefulness of the causal path model for explaining marijuana use, both direct effects (indicated by path coefficients) and indirect effects were examined. Indirect effects were calculated by the Land (Borgatta and Bohrnstedt, 1969:23) procedure. The path coefficient (direct effect) for each relationship was subtracted from the correlation coefficient (total effect) to obtain the indirect effects shown in Table 2. None of the variables was completely determined by the other variables in the path model and error or unexplained variance was calculated by the formula $\sqrt{1 - R^2}$ and entered into the path diagram in Figure 3.

(Figure 3 about here)

Direct effects were examined to assess the value of the model for explaining marijuana use. All the independent variables appear to have a direct causal effect on individual delinquent action (marijuana use). Peer action definitions offers greater predictive power for individual delinquent action (marijuana use) than does any of the other variables since the path coefficient of .70 is greater than other effects on the dependent variable. Apparently, peer action definitions plays an important role in determining an individual's actions under peer pressure. The relationships between the other components of the primary group complement (parental attitude definitions and peer attitude definitions) were not in the direction hypothesized; however, their combined effect is only about half that of peer action definitions. It is possible that a minor role is played by youthful rebellion in the genesis of delinquent behavior. Apparently the communication of gestures (action definitions) is more influential than symbolic verbal communication of attitudes or definitions of peer group members in the genesis of marijuana use.

An examination of the direct and total indirect effects (see Table 2) suggests the likelyhood that primary group definitions may have a considerable effect upon individual marijuana use through their relationship with individual definitions. While partialing techniques might have been used to estimate the magnitude of each indirect

path and suggest the existence of previously unspecified paths, an examination of the differential association processes did not indicate the need for these procedures at this time. Although the direct effects of parental attitude definitions and peer attitude definitions were not in the hypothesized direction, their indirect effects may suggest the existence of relationships not specified in the original formulation of the theory. We believe these factors may be accounted for through the conceptualization of differential association as either a one stage or a two stage process.

## Discussion

The findings tend to support the general path model based upon Sutherland's theory of differential association by explaining 70 percent of the variance in marijuana use by college students. Exposure to an excess of definitions favorable to marijuana use (either verbal or through communication of gestures), whether internalized or not, plays an important role in the explanation of marijuana use. An analysis of the direct and indirect effects for the causal path model suggests that differential association may encompass two distinct processes (see Figure 1), differential attitude association and differential action association, which may work independently or together to produce delinquent behavior. A comparison of path values, indeed, indicates that peer action definitions conceptualized as a one-stage process (not requiring internalization)

has a greater impact upon individual marijuana use than does individual definitions conceptualized as a one stage or a two stage process (requiring internalization). An individual may act on his perceptions of the attitudes held by his peers and parents. These attitudes may be internalized, but it is possible for the individual to use marijuana without internalizing favorable definitions. The relatively greater impact of peer action definitions may be an indication that individuals tend to conform to group pressures, whether or not they agree in principle, in order to maintain their positions in the group.

If two processes of differential association are involved in the genesis of marijuana use and other delinquent behavior, further investigation may reveal types and/or patterns of delinquency which are more closely related to one type of differential association process or the other having distinct policy implications for the rehabilitation of delinquent youth. Introduction of the youth into conforming groups (such as Boy's Club, YMCA, YWCA, Girl Scouts, etc.) may be sufficient for the rehabilitation of individuals most highly influenced by the differential action association process or differential attitude association construed as a one stage process not requiring internalization. It may be possible to prevent further commission of delinquent acts by removing the youth from the situations in which he comes in contact with peers who commit such acts or have favorable definitions to such

commission. A more intensive resocialization process might be required for youth more highly influenced by a two stage differential attitude association process requiring internalization.

The fact that this study was conducted upon middle and upper class youth imposes a limitation on the generalizability of the study since we do not know whether institutionalization is a result of differential enforcement or "real" differences between the institutionalized delinquent and the noninstitutionalized law-violating youth. It is suggested that future research may be undertaken on institutionalized youth and on lower class youth to determine whether these factors result in rejection or modification of the causal path model based upon Sutherland's theory.

## FOOTNOTES

1. For a more complete description of population and sample see Griffin (1972).

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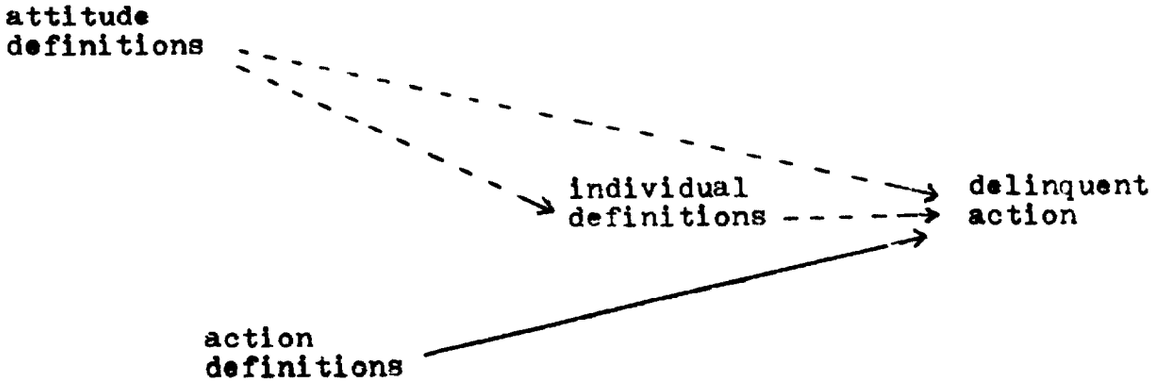


Figure 1. General model of differential association processes.

- - - → (differential attitude association)

——→ (differential action association)

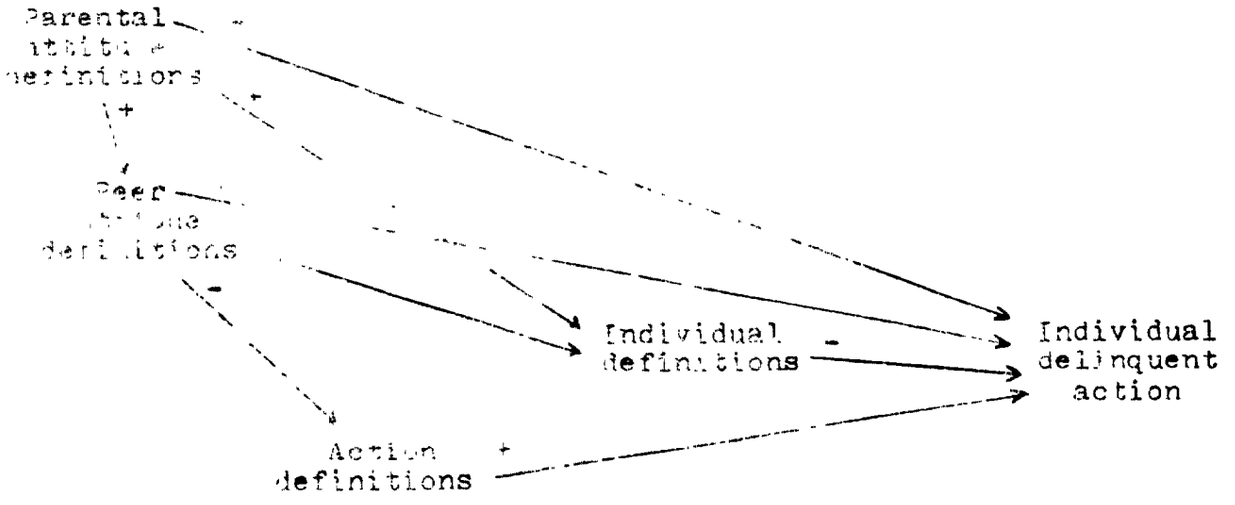


Figure 2. Theoretical causal path model for individual delinquent action.

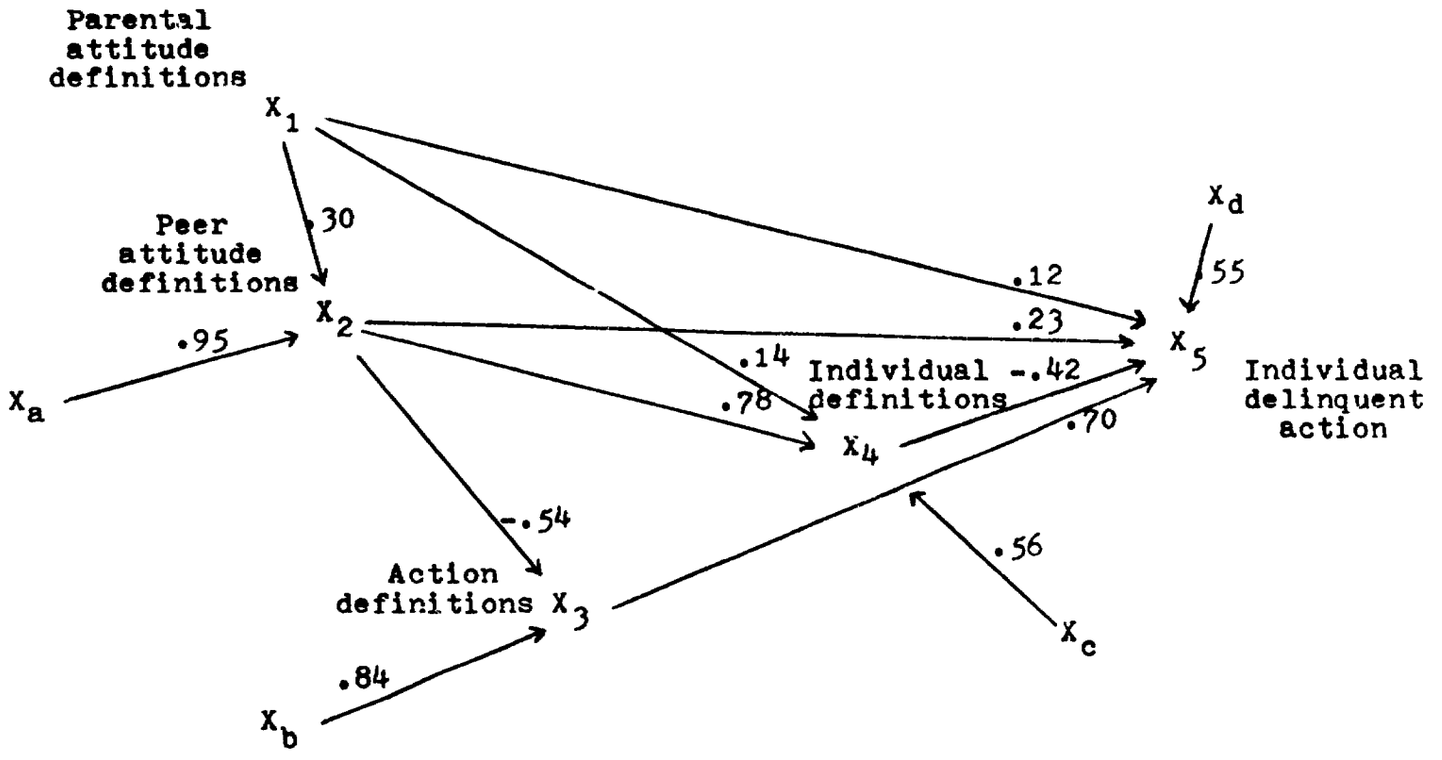


Figure 3. Statistically significant causal path model of differential association processes.

Table 1. Zero-order correlation coefficients for variables in the model.

| Variables | $X_2$ | $X_3$ | $X_4$ | $X_5$ |
|---|---|---|---|---|
| $X_1$ parental attitude definitions | .30 | -.13 | .38 | -.08 |
| $X_2$ peer attitude definitions | | -.54 | .82 | .46 |
| $X_3$ action definitions | | | -.58 | .80 |
| $X_4$ individual definitions | | | | -.60 |
| $X_5$ individual delinquent action | | | | |

Table 2. Partial regression analysis of the variables in the causal path model.

| Dependent and Independent Variables | "F values" | Standardized regression coefficients | Total indirect effect | Percent of variance $R^2$ explained |
|---|---|---|---|---|
| $X_2$ peer attitude definitions | | | | .09 |
| $X_1$ parental attitude definitions | 13.49 | .30 | ---- | |
| $X_3$ action definitions | | | | .29 |
| $X_2$ peer attitude definitions | 56.28 | -.54 | ---- | |
| $X_4$ individual definitions | | | | .69 |
| $X_1$ parental attitude definitions | 8.61 | .14 | .24 | |
| $X_2$ peer attitude definitions | 245.64 | .79 | .03 | |
| $X_5$ individual delinquent action | | | | .70 |
| $X_1$ parental attitude definitions | 5.10 | .12 | .20 | |
| $X_2$ peer attitude definitions | 7.50 | .23 | .23 | |
| $X_3$ action definitions | 140.04 | .70 | .10 | |
| $X_4$ individual definitions | 21.52 | -.42 | .18 | |

*significant at the .05 level