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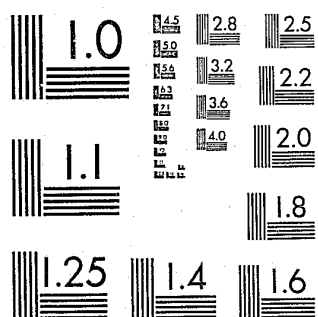


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AN EXAMINATION OF CRIMINAL TYPOLOGIES
BASED ON FREQUENCY AND SERIOUSNESS OF CONTACT
WITH THE POLICE

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# INTRODUCTION

One of the traditional concerns of criminology has been the development of criminal typologies (Ferdinand, 1966:41-42) in which the objective has been to differentiate between types of criminal behavior or types of criminals (Clinard and Quinney, 1967). The criteria upon which these typologies are based have been 1) legalistic, focusing, for example, on differences between felons and misdemeanants, 2) individualistic, emphasizing physical or psychological characteristics of offenders, or 3) social, focusing on the social context of the offender and his criminal activities (Clinard and Quinney, 1973:2-10). This study attempts to evaluate the potential for the development of empirical typologies (Clinard and Quinney, 1973:11-12; Ferdinand, 1966:43-55) which differentiate between individuals on the basis, first, of frequency of contact with the police, and second, the seriousness of these contacts. For example, Wolfgang, et al. (1972), in their study of delinquency in a birth cohort, subdivide their subjects into one-time offenders, non-chronic offenders (2-4 contacts) and chronic offenders (5 or more recorded contacts). Although the authors find that membership in these categories is related to race, academic achievement, intelligence, social class, etc., these were primarily bivariate findings. An extension of this approach would involve a multivariate analysis of group differences. A similar approach can be utilized if individuals are grouped on the basis of seriousness of police contacts, e.g., felonies vs. nonfelonies. Again, are these groups readily distinguishable from each other using a multivariate technique?

# Methodology

The data upon which this analysis is based are similar to those used by Wolfgang, et al. (1972). The official criminal careers of members of two mixed-sex birth cohorts were established by comparing their names against the Master Record File of the police department in a medium-sized (100,000), industrialized city in the Midwest.[1] All recorded contacts with police involving allegations of criminal activity were entered as part of a cohort member's official career. Roughly, 68% of the cohort born in 1942 and 69% of the cohort born in 1949 with continuous residence in Racine had at least one police contact at some time during their lives. These data constitute the basis for creating a typology based on the frequency and seriousness of police contacts.

Further information on the life histories of a sample of cohort members was obtained through extensive interviews with 333 members of the 1942 cohort and 556 members of the 1949 cohort during the summer of 1976. From these interviews, a number of potentially useful discriminators were derived and will be used to differentiate between groups. Table 1 lists each of these variables and its associated coding scheme.[2]

The data were analyzed by means of the discriminant analysis program associated with SPSS (Klecka, 1975; also Lachenbruch, 1976). In discriminant analysis, the objective is to develop a linear combination of variables (a discriminant function) which maximizes the distinctiveness of two or more nominal categories. Using standardized discriminant function coefficients (analogous to standardized regression coefficients), it is possible to determine the relative potency of the variables included in the discriminant function to discriminate between groups, e.g., which variables best characterize group X and which group Y or Z (e.g., Becker and Kronus, 1977).

TABLE 1.   INDEPENDENT VARIABLES

GROUP TIES (TIES)*

| | |
|---|---|
| Family Oriented | = 1 |
| Single-Group Oriented (other than family) | = 2 |
| Multiple Group Oriented | = 3 |
| Independent | = 4 |

*Cohort members were measured on this variable for 4 age periods:
6-13, 14-17, 18-20, 21 and older. Each constitutes a separate variable.

EMPLOYMENT INVOLVEMENT DURING HIGH SCHOOL (HSWORK)

| | |
|---|---|
| Both School Year and Summer | = 1 |
| School Year Only | = 2 |
| Summer Only | = 3 |
| No Employment | = 4 |

ATTITUDE TOWARD SCHOOL (ATTISCHL)

| | |
|---|---|
| Positive | = 0 |
| Slightly Positive | = 1 |
| Slightly Negative | = 2 |
| Negative | = 3 |

FRIENDS' TROUBLE WITH THE LAW:  PREADULT  PERIOD (GEOMETRIC SCALE) [JFRIENDS]

| | |
|---|---|
| No Trouble | = 0 |
| . | |
| Serious Trouble | = 31 |

PERCEIVED NEIGHBORHOOD POLICE PATROL ACTIVITY:  PREADULT PERIOD (PATROL)

| | |
|---|---|
| Neighborhood Not Patrolled | = 1 |
| Neighborhood Lightly Patrolled | = 2 |
| Neighborhood Moderately Patrolled | = 3 |
| Neighborhood Heavily Patrolled | = 4 |

ATTITUDE TOWARD POLICE:  PREADULT PERIOD (ATTIPOL)

| | |
|---|---|
| Positive | = 1 |
| Indifferent | = 2 |
| Negative | = 3 |

PERSONAL CHANGE:  PREADULT PERIOD (PERCHANG)

| | |
|---|---|
| Liked Myself as I Was | = 1 |
| Wanted to be a Different Kind of Person | = 2 |

POSITIVE INFLUENCE FROM SIGNIFICANT OTHERS: PREADULT PERIOD (POSIT)

| | |
|---|---|
| No Positive Influences | = 0 |
| . | |
| All Positive Influences | = 5 |

NEGATIVE INFLUENCES FROM SIGNIFICANT OTHERS:  PREADULT PERIOD (NEGAT)

| | |
|---|---|
| No Negative Influences | = 0 |
| . | |
| All Negative Influences | = 5 |

HOUSEHOLD HEAD ECONOMIC INVOLVEMENT:  PREADULT PERIOD (HHEMP)

| | |
|---|---|
| Regularly Employed | = 1 |
| Irregularly Employed | = 2 |
| Mostly Unemployed | = 3 |

HOUSEHOLD HEAD OCCUPATIONAL STATUS:  PREADULT PERIOD (HHSTATUS)

| | |
|---|---|
| Professional, Managerial | = 1 |
| Clerical, Sales | = 2 |
| Craftsman, Foreman | = 3 |
| Operatives | = 4 |
| Maintenance, Service | = 5 |
| Private Household | = 6 |
| Industrial Laborer | = 7 |
| Agricultural Laborer | = 8 |
| Unemployed | = 9 |

FAMILY INTACTNESS:  PREADULT PERIOD (FAMILY)

| | |
|---|---|
| Lived with Both Parents | = 1 |
| Lived with One Parent | = 2 |
| Lived with Neither Parent | = 3 |

STATUS OF RESIDENTIAL AREA:  PREADULT PERIOD (RESIDENC)

| | |
|---|---|
| High Status | = 1 |
| . | |
| Low Status | = 6 |

SELF-REPORTED DELINQUENCIES:  PREADULT PERIOD (DELINQ)

    Didn't Commit Delinquencies  =  1
    Committed Delinquencies     =  2


AUTOMOBILE USE SCALE:  PREADULT PERIOD (AUTO)

    Low Usage           =  0
                        :
    High Usage          = 15


CHILDREN IN FAMILY OF ORIENTATION:  PREADULT PERIOD (CHILDREN)

    Only Child          =  1
                        :
    8 or More Children   =  8


EDUCATIONAL ATTAINMENT (EDUC)

    College            =  1
    High School       =  2
    10-12 Years       =  3
    Less than 10 Years  =  4


YEARS BEFORE LEAVING HOME (LVHOME)

    32 Years ('42)/28 Years ('49)  =  0*
                        :
    13 Years             = 18 ('42)/14 ('49)

*Code 0 indicates that the cohort member is still living with parents or family at the time they were interviewed; Code 18 (13 years) is the earliest age when a cohort member left home.


AGE AT FIRST FULL-TIME OCCUPATION (AGEOCC1)

    12 Years             =  1
                        :
    34 Years ('42)/28 Years ('49)  = 22 ('42)/16 ('49)*

*Code 22/16 indicates that cohort member had never had a full-time occupation up to the time they were interviewed; Code 1 is the earliest age a cohort member had a full-time occupation.


STATUS OF FIRST FULL-TIME OCCUPATION (STATOCC1)*

    Professional           =  1
                        :
    Unemployed          =  9
*Same as HHSTATUS


AGE AT MARRIAGE (AGEMARRY)

    16 Years             =  1
                        :
    35 Years ('42)/29 ('49)    = 20 ('42)/14 ('49)*

*Code 20/14 indicates that cohort members had never married at time of interview.


AMOUNT OF TIME WORKED SINCE EDUCATION COMPLETED (WORKED)

    All of the Time     =  1
    Most of the Time    =  2
    Little of the Time  =  3


STATUS OF PRESENT OCCUPATION (PRESOCC)*

    Professional           =  1
                        :
    Unemployed          =  9
*Same as HHSTATUS


PRESENT INCOME (INC)

    High               =  1
                        :
    Low               = 37


FRIENDS' TROUBLE WITH THE LAW:  ADULT PERIOD (GEOMETRIC SCALE) [AFRIENDS]

    No Trouble          =  1
                        :
    Serious Trouble     = 31

When performing discriminant analysis, the number of discriminant functions derived is one less than the number of groups being discriminated (g-1). The first function derived by the procedure is the most powerful in that it "explains" the greatest amount of variance in the dependent variable, i.e., maximally distinguishes between groups. In practice, this appears to mean that discriminant analysis maximizes the difference between the groups having the largest and smallest group centroids (a group centroid is simply the mean discriminant function score for each group). Thus, the first discriminant function distinguishes between the two most distinctive groups. The second discriminant function explains the greatest residual variance after the first has been derived; that is, it distinguishes between the two groups that are secondarily most distinctive. Each derived discriminant function is orthogonal to the others.

Although g-1 is the maximum number of discriminant functions derivable, it is not necessarily the case that all functions contribute significantly to group discrimination. For example, in a four-group problem, three discriminant functions (4-1) are potentially derivable. However, a significance test may indicate that deriving a third function adds virtually nothing to the discriminatory power of the model as a whole. In statistical grounds, it would be safe to ignore the function in the presentation of results (Becker and Kronus, 1977:489; Bibb and Roncek, 1976). This, in turn, suggests that not all groups are distinct from one another and should perhaps be reorganized to more accurately reflect actual empirical differences.

Procedurally, this analysis will first attempt to discriminate between groups of individuals on the basis of frequency of contact with police. In this, the frequency categories described by Wolfgang, *et al.* (1, 2-4, or 5 or

more contacts) will serve as a preliminary model for differentiation. Additionally, however, the group with no contacts with the police will become a fourth group to be discriminated.

As a further step, an attempt will be made to discriminate between groups on the basis of the seriousness of recorded contacts. First, among those who had police contacts, the goal will be to distinguish between those with careers that include at least one felony and those whose careers do not. Second, and again among those with recorded contacts, the objective will be to distinguish between those who have at least one FBI Part I offense (homicide, rape, robbery, assault, burglary, larceny, and auto theft) and those without such an offense as part of their career. Finally, an attempt will be made to distinguish between those whose careers consist of no contacts, or contacts for juvenile status offenses, or traffic offenses, or contacts for suspicion and investigation and those with contacts for any other offense. These three approaches represent alternative means for classifying individuals according to the seriousness of an official criminal career.

There are three primary goals of the analysis undertaken here. The first goal is to determine if the frequency and seriousness categories described above are empirically distinct ones. Second, if distinctiveness exists, interest lies in determining which variables contribute most to discriminating between groups, e.g., which variables are most characteristic of those with felonies in their careers relative to those without felonies? Finally, the analysis will provide a means of determining how well the set of variables used as discriminators discriminate between groups. The statistic, $W^2$ (omega-squared), an analogue to $R^2$ in multiple regression (see Tatsuoka, 1970:48-51), will provide this information.

The analysis described above will be performed separately for each cohort as a means of comparative reliability. To the extent that the results are comparable across cohorts, there will be support for the contention that group differences are real and not simply a function of the data at hand. Further, within each cohort, the analysis will be performed for three age periods: 1) a preadult period extending from ages 6 through 20[3], 2) an adult period beginning at age 21 and extending to the data collection cut-off date (June 1, 1974) when 1942 cohort members were age 32 and 1949 members were age 25, and 3) the combined pre-adult and adult periods. It may be expected that the variables operating as important group discriminators will vary by age period.

## RESULTS

### Frequency Categories

#### Preadult Period

Table 2 presents the results of the discriminant analysis performed on the two cohorts in an attempt to distinguish between the four frequency of contact categories (0, 1, 2-4, 5+) within the preadult period. Only the findings based on the first discriminant function are presented here.[4] An examination of this table indicates that Group 1 (those with no contacts) is maximally distinguished from Group 4 (Those with 5 or more contacts). The respective centroid values are .397 and -1.313.[5] These values are used in the following way:

Rule 1. The group with the highest centroid value (taking sign into account) is characterized by those variables having positive coefficients (standardized or unstandardized) on a discriminant function; conversely,

the group having the lowest centroid value is characterized by those variables having negative coefficients.

Rule 2. For each group, the characteristic variables[6] are interpreted to mean that a high score on that variable (disregarding sign) is characteristic of members of that group.

Although the interpretability of discriminant analysis appears to be complex, it is actually not that difficult in practice. For example, Group 1 in the 1942 cohort was the high centroid (.397). Thus, positively signed standardized coefficients are most characteristic of it (Rule 1). However, examination of these coefficients indicates that none equal or exceed the .2 selection criterion. In this case, it was decided to lower the selection value to .1. Only two variables meet this criterion: age at first full-time job (.104) and personal change (.149). According to Rule 2, high scores on these variables characterize members of this group, i.e., wanting to be a different type person and higher age at first full time job are most characteristic of those with no recorded police contacts. However, it is suggested that the relatively low magnitude of the coefficients indicates that these variables cannot be viewed as being highly characteristic of this group.

Moving to Group 4 (5 or more contacts) [1942], the centroid value (-1.313) is lowest (taking sign into account). Thus, the negatively signed standardized coefficients are most characteristic of this group. Again, according to Rule 2, high scores on these variables will be characteristic of members of this group.[7] Group 4 members 1) come from homes where the household head had low occupational status, 2) come from low status residential areas, 3) tend to have a more negative attitude toward the police, 4) had greater access to and more frequently used an automobile, and 5) had friends in more serious trouble with the law. The magnitude of the standardized coefficients seems to indicate

that these variables are moderately characteristic of those with 5 or more recorded contacts.

The $W^2$ value (.295) is interpreted to mean that 29.5% of the variation in group membership is accounted for by the first discriminant function, which, as previously indicated, includes all the relevant variables on a discriminant function and not simply those listed in Table 2 as characteristic ones. Since $W^2$ is relatively low, it may be assumed that other variables not included in the analysis account for group membership. Substantively, the characteristic variables, especially those characteristic of Group 4, the high contact group, reflect many of the traditional correlates of official crime and delinquency. It is interesting to note, however, that Group 1 members tended to be older at the time of their first full time occupation. Although this is contrary to what might be expected from the perspective of control theory (e.g. Hirschi, 1969) partial explanation is found in the fact that there is a moderate, positive correlation (R = .39) between age at first full time job and educational attainment. Instead of working, Group 1 members are going to school, an activity which *is* consistent with control theory.

In the 1949 cohort, the first discriminant function also differentiates primarily between Groups 1 and 4.[8] There is, in fact, a remarkable similarity in the results across cohorts. Group 1 is characterized by the same two variables as its 1942 counterpart, personal change (.121) and age at first full time job (.108), as well as a third one, attitude toward school (.110). Interestingly, those with no recorded police contacts tend to have had a more unfavorable attitude toward high school. There is no apparent explanation for this unexpected finding except perhaps that Group 1 found the school context to be a negative experience and compensated by greater involvement in other, non-academic pursuits which insulated them from police contacts. The

standardized coefficients for the characteristic variables are, again, smaller than .2 indicating that they are not very potent discriminators.

Turning to Group 4 in the 1949 cohort, the characteristic variables substantially duplicate those of the same group in the 1942 cohort except that occupational status of household head has been dropped. Low status of residential area (-.214), negative attitude toward the police (-.270), high access to and use of an automobile (-.229), and having had friends in relatively serious trouble with the law (-.395) are most characteristic of Group 4 members. The standardized coefficients are moderately high but mot exceptionally potent. The discriminant function as a whole accounts for approximately 39% ($W^2$=.386) of the variance in group membership, approximately 10% more than in the 1942 cohort.

## Adult Period

In cross-cohort perspective, the results of the discriminant analysis for the adult period (see Table 3) are not as clear as they were for the juvenile period. Although Groups 1 and 4 are maximally distinct, there is less correspondence in characteristic variables over groups and cohorts in the adult period than there was in the juvenile period. It is suggested that the cross-cohort dissimilarities are a product of the fact that members of the two cohorts have not been adults for an equal length of time. Those in the 1942 cohort, born earlier, have been adults for 7 years longer than 1949 cohort members. These extra years of "experience" as adults could make a radical difference in how they responded to the interview questions. Their memories and interpretation of past events, because of the difference in stage of the life cycle, could have a strong impact on the findings. The possibility should be held in mind when viewing the study results.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|

TABLE 2. DISCRIMINANT ANALYSIS RESULTS FOR THE PREADULT PERIOD

| | Group | Centroid | Characteristic Values | Standardized Coefficients | Group | Centroid | Characteristic Values | Standardized Coefficient | $w^2$ |
|---|---|---|---|---|---|---|---|---|---|
| 1942 | 1 | .397 | PERCHANG | .149 | 4 | -1.313 | HHSTATUS | -.210 | .295 |
| | | | AGEOCC1 | .104 | | | RESIDENC | -.273 | |
| | | | | | | | ATTIPOL | -.282 | |
| | | | | | | | AUTO | -.375 | |
| | | | | | | | JFRIENDS | -.373 | |

Function 1

| 1949 | 1 | .475 | PERCHANG | .121 | 4 | -1.353 | RESIDENC | -.214 | .386 |
|---|---|---|---|---|---|---|---|---|---|
| | | | AGEOCC1 | .108 | | | ATTIPOL | -.270 | |
| | | | ATTISCHL | .110 | | | AUTO | -.229 | |
| | | | | | | | JFRIENDS | -.395 | |

Group 1 = 0 Contacts
Group 2 = 1 Contact
Group 3 = 2-4 Contacts
Group 4 = 5 or More Contacts

TABLE 3. DISCRIMINANT ANALYSIS RESULTS FOR THE ADULT PERIOD

| | Group | Centroid | Characteristic Variables | Standardized Coefficients | Group | Centroid | Characteristic Variables | Standardized Coefficients | $w^2$ |
|---|---|---|---|---|---|---|---|---|---|
| 1942 | 1 | .317 | CHILDREN | .203 | 4 | -1.374 | EDUC | -.363 | .264 |
| | | | WORKED | .369 | | | AGEMARRY | -.297 | |
| | | | | | | | ATTIPOL | -.260 | |

Function 1

| 1949 | 1 | .289 | HHEMP | .163 | 4 | -1.557 | AGEMARRY | -.272 | .230 |
|---|---|---|---|---|---|---|---|---|---|
| | | | TIES 1820 | .137 | | | ATTIPOL | -.277 | |
| | | | HSWORK | .107 | | | PRESOCC | -.238 | |
| | | | | | | | AFRIENDS | -.252 | |

Group 1 = 0 Contacts
Group 2 = 1 Contact
Group 3 = 2-4 Contacts
Group 4 = 5 or More Contacts

In the 1942 cohort, the characteristic conditions of Group 1 membership are 1) coming from a family with a large number of children (.203) and 2) not having worked regularly since completing one's education (.369). The finding that large families are associated with having no police contacts contradicts previous research findings (e.g., Hirschi, 1969: 239-40). That those who have worked least regularly since completing their education are among the no contact group is disconcerting since an opposite result might be expected. However, these individuals also tend to marry younger (r=.31) and it may be the existence of the marital relationship which serves to influence the likelihood of police contact rate.

For Group 4 on Function 1, the characteristic variables are education (-.363), age at marriage (-.297), and attitude toward police (-.260). Individuals with 5 or more contacts received less education, married at a later age, and had a more negative attitude toward the police. The first and last of these are traditional correlates of crime. It is interesting to note that the negative attitude toward the police is a carryover--referring to the attitude that these people held during their preadult period. Also, the finding that Group 4 members married later tends to support the argument presented in the preceding paragraph that early marriage acts as an insulator against police contacts.

In the 1942 cohort, the first discriminant function accounts for approximately 26% ($W^2$=.264) of the variance in group membership, slightly less than the first function in the preadult period. Again, it must be concluded that the most potent discriminators of police contacts have not been included here.

Turning to Function 1 for the 1949 cohort, Groups 1 and 4 are the most distinctive groups according to the analysis.[9] The characteristic variables for Group 1 bear no resemblance to those in Group 1 in the 1942 cohort.

However, the standardized coefficients are not large, indicating their relative unimportance as discriminators. Some interesting results are found in interpreting the characteristic variables. For example, those with no recorded contacts came from families (in their youth) whose household heads tended to be less than regularly employed (.163) and who were themselves less likely to have been employed during high school (.107). These findings seem to contravene the traditional assumption that irregular or absent employment is conducive to crime. Moreover, those with no contacts also tended to be less tied to a single group, being more eclectic or independent in their social relationships during the age period 18-20 (.137). All three characteristic variables for Group 1 are carryovers from the preadult period, indicating that group membership in the adult period is contingent upon historical rather than contemporary conditions.

Group 4 in the 1949 cohort is similar to its counterpart in the 1942 cohort in that older age at marriage (-.272) and a negative attitude toward police (-.277) emerge as characteristic variables. However, two contemporaneous variables, status of present occupation (-.238) and extent of adult friends' trouble with the law (-.252) are also characteristic of members of this group, i.e., low occupational status and high degree of friends' trouble, conditions that are not unexpected. The $W^2$ value (.230) indicates that the discriminant function accounts for less than one-quarter of the variance in group membership. This is almost 16% lower than the $W^2$ for this group on Function 1 during the preadult period for this cohort (i.e., $W^2$=.386).

### Combined Juvenile and Adult Periods

This section reports the results of the discriminant analysis for Groups 1 and 4 during the combined juvenile and adult period (see Table 4). By combining age periods, more cohort members are potentially available for inclusion in the

TABLE 4. DISCRIMINANT ANALYSIS RESULTS FOR COMBINED JUVENILE AND ADULT PERIODS

| Group | Centroid | Characteristic Variables | Standardized Coefficients | Group | Centroid | Characteristic Variables | Standardized Coefficients | $w^2$ |
|---|---|---|---|---|---|---|---|---|
| 1942 | | | | | | | | |
| 1 | .628 | WORKED | .431 | 4 | −.963 | STATOCC1 | −.258 | .347 |
| | | CHILDREN | .228 | | | RESIDENC | −.208 | |
| | | | | | | AUTO | −.228 | |
| | | | | | | JFRIENDS | −.234 | |

Function 1

| Group | Centroid | Characteristic Variables | Standardized Coefficients | Group | Centroid | Characteristic Variables | Standardized Coefficients | $w^2$ |
|---|---|---|---|---|---|---|---|---|
| 1949 | | | | | | | | |
| 1 | .518 | WORKED | .178 | 4 | −1.141 | ATTIPOL | −.239 | .399 |
| | | HSWORK | .119 | | | JFRIENDS | −.317 | |

Group 1 = 0 Contacts
Group 2 = 1 Contact
Group 3 = 2-4 Contacts
Group 4 = 5 or More Contacts

highest contact category (5 or more contacts) than by considering each age period alone. Thus, the person with 2 contacts in the juvenile period and 3 in the adult period will now be in Group 4 for the combined period whereas they were previously in Group 3 within age periods.

Function 1 in the 1942 and 1949 cohorts distinguishes between Groups 1 and 4.[10] In the 1942 cohort, Group 1 is characterized by individuals who have worked irregularly since completing their education (.431) and by those who come from families with larger numbers of children (.228). The irregular work, again, is possibly mediated by the lower age at marriage which tends to insulate these people from police contacts. Similarly, coming from a large family seems to act as an insulator against police contact over a lifetime.

Those with 5 or more contacts (Group 4) are characterized by 1) lower status of first full time occupation (-.258), 2) having resided in a low status residential area during youth (-.208), 3) having had access to and made frequent use of an automobile during youth (-.228) and 4) having had friends' in relatively serious trouble with the law during youth (-.234). All of these are traditional correlates of crime and delinquency.

Group 1 in the 1949 cohort, like its 1942 counterpart, is also characterized by less regularity of work after finishing one's education variable (.178) but substitutes involvement in work during high school (.119) for family size as a second discriminating variable. Specifically, Group 1 persons were less likely to have been deeply involved in employment while in high school. Thus, rather than facilitating police contacts, relative unemployment seems to operate as an inhibitor of trouble with the law. The standardized coefficients tend to be rather low for this group.

Group 4 in the 1949 cohort is characterized by two variables, attitude toward the police (-.239) and extent of friends' trouble with the police (-.317).

These individuals tend toward a negative attitude toward the police and had friends who were in relatively serious trouble with the law during their youth.

For the 1942 cohort, the first discriminant function accounts for nearly 35% ($W^2=.347$) of the variance in group membership while in the 1949 cohort, it is about 40% ($W^2=.399$) of the variance. Notably, the explained variance for the combined age periods is greater than that for the juvenile or adult periods individually. That is, group distinctiveness is more apparent over a lifetime than it is for age periods within a lifetime.

## Discussion

The results of the discriminant analysis are not clear-cut. The most consistent finding throughout the analysis is that those with no police contacts are most distinct from those with 5 or more police contacts, a result that is not totally unexpected. However, the degree of distinctiveness (measured by $W^2$) is relatively small, approaching 40% in the 1949 cohort and 35% in the 1942 cohort for the combined preadult and adult period. These values are smaller when each age period is separately considered. Thus, most of the variability in group membership remains unaccounted for by the variables derived from the interview schedule.

One of the encouraging outcomes of the analysis is the degree of cross-cohort similarity in results for the preadult period. In both cohorts, members of the zero contact group are characterized by a higher age at the time of first full-time employment and the desire to be a different kind of person during this period. Contrary to what might be expected on the basis of social control theory, the absence of economic involvement (i.e., not having a job), is conducive to having fewer contacts with the law. In turn, this suggests being involved in an occupational pursuit constitutes a criminogenic influence,

perhaps due to the presence of greater opportunities or the influence of peers and colleagues among other things. Further, the desire for personal change rather than stability of identity was more conducive to having no contacts. Those in the high contact frequency category in both cohorts were most likely to come from low status residential areas, have a negative attitude toward the police, to have made greater use of the automobile, and to have had friends in more serious trouble with the law.

The failure to achieve the same degree of cross-cohort consistency of results during the adult period is, as previously suggested, most likely a consequence of the fact members of the two cohorts have not experienced adulthood for the same length of time. If 1949 cohort members were re-interviewed 7 years later when they had reached the same stage of the life cycle as that reached by 1942 members in 1976, then the study results would perhaps be more comparable. This, of course, is only a matter of conjecture.

One of the problems that derives from a failure to achieve a high level of discrimination between the two most extreme frequency groups is that this implies even greater difficulty in distinguishing between adjacent groups. That is, if the zero contact and 5 or more contact groups are relatively indistinct, then lack of distinctiveness must be exacerbated when contrasting the zero contact and one contact categories. This suggests the need to 1) recombine cohort members into other frequency groupings to try to maximize within group homogeneity and between group distinctiveness, or 2) search for an alternate set of variables which do a better job of discriminating between the existing categories. Since the latter is not feasible under the circumstances, we will attempt the former--recombining categories to search for a different set of frequency categories which are more distinguishable on the basis of the existing set of variables.

## Recombined Frequency Categories

In this section, the contact frequency categories have been recombined as dichotomies to facilitate the analysis and to provide a less ambiguous interpretation than that which often results when multiple categories are used. The analysis will be run in a series, beginning with a comparison of those with no contacts versus those with one or more contacts. Next, those who had zero or one police contact, are combined into a single group and compared to those with 2 or more contacts. Then, those with two or fewer contacts are compared to those with three or more contacts, etc., with a final comparison of those with four or fewer contacts and those with 5 or more contacts. Within the specified range of contacts, this procedure should indicate whether there is an empirically establishable "breaking point" between a low frequency group and a high frequency group. Again, the analysis will be undertaken for the pre-adult, and combined age periods and cross cohorts.

### Preadult Period

Table 5 present the discriminant analysis results for the preadult period, comparing the various low and high frequency categories for each cohort. One of the first things to note here is that in both cohorts; very few of the variables turn out to be characteristic of the low frequency category, however it is defined. That is, it appears that the interview data did not tap the dimensions by which low frequency individuals could be described. Alternately, the variables seem to be more descriptive of high frequency individuals. A second important point is that the data for this period do not indicate a definite breaking point which differentiates between high and low frequency contactees. If there were such a point, it might be expected that it would be reflected in a large change in the size of $W^2$ at a given point. However,

TABLE 5 . A COMPARISON OF DISCRIMINANT ANALYSIS RESULTS FOR ALTERNATIVE DEFINITIONS OF HIGH AND LOW CONTACT FREQUENCY CATEGORIES FOR THE PREADULT PERIOD, BY COHORT

| 1942 | | | | 1949 | | | |
|---|---|---|---|---|---|---|---|
| Low Frequency | | High Frequency | | Low Frequency | | High Frequency | |
| 0-4 | | 5 or More | | 0-4 | | 5 or More | |
| Variable | Standardized Coefficient | Variable | Standardized Coefficient | Variable | Standardized Coefficient | Variable | Standardized Coefficient |
| TIES1417 | .234 | AUTO | -.313 | (None) | ---- | ATTIPOL | -.268 |
| | | JFRIENDS | -.500 | | | JFRIENDS | -.523 |
| | | ATTIPOL | -.339 | | | AGEMARRY | -.215 |
| | | TIES6-13 | -.315 | | | | |
| | | HHSTATUS | -.224 | | | | |
| $W^2 = .253$ | | POSIT | -.207 | $W^2 = .326$ | | | |
| 0-3 | | 4 or More | | 0-3 | | 4 or More | |
| (None) | --- | AUTO | -.280 | (None) | --- | ATTIPOL | -.306 |
| | | JFRIENDS | -.433 | | | JFRIENDS | -.383 |
| | | ATTIPOL | -.337 | | | AGEMARRY | -.206 |
| | | TIES6-13 | .302 | | | RESIDENC | -.240 |
| $W^2 = .224$ | | RESIDENC | -.316 | $W^2 = .314$ | | AUTO | -.219 |
| 0-2 | | 3 or More | | 0-2 | | 3 or More | |
| (None) | --- | AUTO | -.294 | (None) | --- | ATTIPOL | -.302 |
| | | JFRIENDS | -.322 | | | JFRIENDS | -.361 |
| | | ATTIPOL | -.234 | | | AUTO | -.236 |
| | | TIES6-13 | -.207 | | | RESIDENC | -.226 |
| | | RESIDENC | -.332 | | | | |
| $W^2 = .220$ | | DELINQ | -.280 | $W^2 = .296$ | | | |
| 0-1 | | 2 or More | | 0-1 | | 2 or More | |
| PERCHANG | .250 | AUTO | -.326 | PERCHANG | .259 | ATTIPOL | -.263 |
| CHILDREN | .252 | JFRIENDS | -.276 | | | JFRIENDS | -.217 |
| | | ATTIPOL | -.208 | | | AUTO | -.264 |
| | | RESIDENC | -.385 | | | RESIDENC | -.238 |
| | | DELINQ | -.281 | | | LVHOME | -.233 |
| $W^2 = .244$ | | AGEMARRY | -.215 | $W^2 = .299$ | | EDUC | -.261 |
| 0 | | 1 or More | | 0 | | 1 or More | |
| CHILDREN | .230 | AUTO | -.438 | PERCHANG | .273 | EDUC | -.260 |
| | | RESIDENC | -.262 | | | RESIDENC | -.216 |
| | | AGEMARRY | -.309 | | | AUTO | -.295 |
| $W^2 = .213$ | | | | $W^2 = .195$ | | TIES6-13 | -.205 |

there tends to be a gradual rather than abrupt change in the relative amount of discriminatory power. This gradual increase does suggest that there may be greater distinctiveness of high and low frequency groups at classification levels outside the range of the present analysis. For example, it may be that the breaking point occurs between eight or less and nine or more contacts.

A cross-cohort comparison of the low frequency category indicates that characteristic variables (again, those with standardized coefficients of .2 or greater) are evident only at the lowest frequency levels, i.e., zero, or 0 and 1. In the 1942 cohort, members of the low frequency category come from families with large numbers of children and were more likely to express a desire to be a different type of person while they were growing up. In the 1949 cohort, only an expressed desire to be a different kind of person characterizes the low frequency category.

For the high frequency category, there tends to be some consistency of characteristic variables over varying levels of frequency and across cohorts. In the 1942 cohort, for example, high levels of automobile use, having friends in serious trouble with the law, and having a negative attitude toward the police tend to characterize high frequency category members regardless of how high frequency is defined. At lower levels of the high frequency category, coming from lower status residential areas, admitting to delinquencies for which one was never caught, and higher age at marriage are characteristic of high frequency group members. At higher levels of the high frequency category (3 or more contacts), being more eclectic or independent in one's ties is associated with group membership.

In the 1949 cohort, high automobile use, having a negative attitude toward the police, having friends in relatively serious trouble with the law, and coming from lower status residential areas are consistently related to

membership in the high frequency category. The first three of these are identical to the characteristic variables in the 1942 cohort. It should also be observed that while age at marriage and group ties at ages 6 to 13 are characteristic variables as they were in the 1942 cohort, they have reversed position. The group ties variable is characteristic at lower levels of high frequency while age at marriage is characteristic at higher levels of the high frequency category. Educational attainment also appears as a characteristic variable at lower levels of the high frequency category.

There seems to be a fairly stable core of characteristic variables for the high frequency category consisting of attitude toward the police, extent of juvenile friends' trouble with the law, extent of automobile use, and status of residential area in both cohorts suggesting that these are relatively important discriminators. However, the fact that this core remains fairly constant over variations in the operationalization of the high frequency category implies that high and low frequency categorizations are relative rather than absolute, that any classification system based on frequency of police contact is bound to be arbitrary. Therefore, the approach to classifying individuals in terms of frequency of contact will depend on the needs of the researcher.

Several other variables in the analysis serve as what might be termed "secondary" discriminators, e.g., age at marriage, group ties, self-reported delinquencies, etc. However, their influence is not as consistent as the core variables. Their discriminatory power, for example, appears to be dependent on how high frequency is operationalized. Moreover, the same relationship does not hold across cohorts, e.g., age at marriage is a discriminator at low levels of high frequency in the 1942 cohort but high levels in the 1949 cohort.

The discriminatory power of the various models in Table 5 is moderate, ranging in the 1942 cohort from a low of 21.3% to a higher of 24.3%. In the

1949 cohort, the range is from 19.5% to 32.6%. As previously noted, there is a tendency for $W^2$ to increase at higher levels of the low frequency category, i.e., as the low frequency category increases from 0 to 0-4 contacts. This may indicate a need for further comparison with categorizations beyond the range specified here.

## Adult Period

The results of the discriminant analyses for the adult period are presented in Table 6 . As in the preadult period, very few of the variables are characteristic of the low frequency category. In the 1942 cohort, the most consistent result is the finding that having worked relatively little since completing one's education is characteristic at all low frequency levels. As previously suggested, it seems that absence of contact with the economic sector is conducive to low levels of involvement with the law, or alternately, that work increases the potential for involvement with the police. Additionally, at higher levels of low frequency, coming from a family with a large number of children and living in a neighborhood heavily patrolled by the police is associated with membership in the low frequency category.

In the 1949 cohort, there do not appear to be any variables which consistently characterize the low frequency category. Higher age at the time of first full-time occupation occurs twice at the highest levels of low frequency, again leading to the observation that lack of economic involvement is associated with fewer contacts with the law. Similarly, at lower levels of frequency, having worked relatively little since completing one's education and coming from a family where the household head was less regularly employed are also characteristic variables. It should be noted that there is little cross-cohort comparability in terms of characteristic variables.

TABLE 6. A COMPARISON OF DISCRIMINANT ANALYSIS RESULTS FOR ALTERNATIVE DEFINITIONS OF HIGH AND LOW CONTACT FREQUENCY CATEGORIES FOR THE ADULT PERIOD, BY COHORT

| | 1942 | | | 1949 | | | |
|---|---|---|---|---|---|---|---|
| Low Frequency | | High Frequency | | Low Frequency | | High Frequency | |
| 0-4 | | 5 or More | | 0-4 | | 5 or More | |
| Variable | Standardized Coefficient | Variable | Standardized Coefficient | Variable | Standardized Coefficient | Variable | Standardized Coefficient |
| CHILDREN | .236 | EDUC | -.450 | AGEOCC1 | .334 | AGEMARRY | -.306 |
| PATROL | .333 | LVHOME | -.306 | | | ATTIPOL | -.278 |
| WORKED | .232 | AGEMARRY | -.432 | | | PRESOCC | -.290 |
| | | RESIDENC | -.203 | | | AFRIENDS | -.267 |
| | | ATTIPOL | -.222 | | | RESIDENC | -.215 |
| | | PRESOCC | -.222 | | | | |
| $W^2=.249$ | | AFRIENDS | -.295 | $W^2=.193$ | | | |
| 0-3 | | 4 or More | | 0-3 | | 4 or More | |
| CHILDREN | .252 | EDUC | -.371 | AGEOCC1 | .256 | AGEMARRY | -.313 |
| PATROL | .249 | AGEMARRY | -.390 | | | ATTIPOL | -.265 |
| WORKED | .240 | ATTIPOL | -.239 | | | PRESOCC | -.316 |
| TIES14-17 | .226 | JFRIENDS | -.243 | | | AFRIENDS | -.280 |
| | | PRESOCC | -.279 | | | TIES6-13 | -.258 |
| $W^2=.254$ | | TIES6-13 | -.228 | $W^2=.220$ | | | |
| 0-2 | | 3 or More | | 0-2 | | 3 or More | |
| CHILDREN | .246 | AGEMARRY | -.214 | (None) | --- | AGEMARRY | -.252 |
| WORKED | .284 | RESIDENC | -.212 | | | ATTIPOL | -.270 |
| PERCHANG | .273 | ATTIPOL | -.342 | | | PRESOCC | -.213 |
| | | JFRIENDS | -.284 | | | AFRIENDS | -.274 |
| $W^2=.243$ | | PRESOCC | -.260 | $W^2=.240$ | | TIES6-13 | -.226 |
| 0-1 | | 2 or More | | 0-1 | | 2 or More | |
| WORKED | .417 | EDUC | -.226 | HHEMP | .204 | AGEMARRY | -.218 |
| | | ATTIPOL | -.312 | TIES18-20 | .207 | ATTIPOL | -.298 |
| | | JFRIENDS | -.233 | | | PRESOCC | -.227 |
| $W^2=.238$ | | TIES18-20 | -.234 | $W^2=.251$ | | AFRIENDS | -.259 |
| 0 | | 1 or More | | 0 | | 1 or More | |
| WORKED | .574 | STATOCC1 | -.275 | WORKED | .330 | AGEMARRY | -.315 |
| | | HHSTATUS | -.222 | | | TIES6-13 | -.226 |
| $W^2=.181$ | | JFRIENDS | -.212 | $W^2=.173$ | | | |

There is a greater degree of consistency among characteristic variables over levels of the high frequency category in both cohorts. In the 1942 cohort, having friends in serious trouble with the law during the preadult period and having a negative attitude toward the police are most descriptive of high contact frequency individuals. Higher age at the time of marriage and low status of present occupation as an adult also seem to be characteristic variables at higher levels of the high frequency category. Finally, low educational attainment and coming from a low status residential area also appear as characteristic variables but their influence is less consistent than the other values already mentioned.

An examination of the data for the 1949 cohort indicates that it differs in several respects from the 1942 cohort. First, higher age at marriage is consistently characteristic across all levels of the high frequency category. At all but the lowest level of high frequency, a negative attitude toward the police, low status of present occupation, and greater seriousness of adult friends' trouble with the law characterize members of the high frequency category. Somewhat incongruously, the group ties that one had during the 6-13 age period (specifically, a tendency toward eclecticism in or independence from, group ties) are somewhat characteristic of three out of five levels of high frequency.

Across cohorts, it may be seen that attitude toward police, status of present occupation, and age at marriage are found in common fairly consistently. However, one notable difference is that extent of _juvenile_ friends' trouble with the law is characteristic in the 1942 cohort but it is _adult_ friends' trouble in the 1949 cohort. A further difference between the cohorts is that while educational attainment is found to be characteristic and group ties for the 6-13 age period is not in the 1942 cohort, just the reverse is true in the 1949 cohort.

Again it may be observed that the $W^2$ values are relatively low although significant. In the 1942 cohort, $W^2$ ranges from a low of 18.1% when low frequency equals zero or no contact to a high of 25.4% when low frequency is defined as 0-3 contacts. For the 1949 cohort, the $W^2$ values are smaller than those for the 1942 cohort, ranging from a low of 17.3% when low frequency equals zero to a high of 24.1% when low frequency equals 0-1 contacts. Again, it must be concluded that the variables obtained through the 1976 interviews do not tap the important dimensions of group distinctiveness when frequency categories are used.

### Combined Preadult and Adult Period

In examining the discriminant analysis results for the combined preadult and adult periods (Table 7), some similarity with the individual periods is notable within the low frequency category. The findings for the 1942 cohort indicate, for example, that the extent to which one has worked since completing an education has been "borrowed" from the adult period as a characteristic variable. For the combined period, this variable is characteristic over all levels of low frequency. Similarly, the number of children is borrowed from the preadult period and is characteristic at lower levels of low frequency but not at higher levels. For the low frequency category in the 1949 cohort combined period, the characteristic variables bear small resemblance to those found in the individual periods. There is very little that can be said here since, in most instances, no variables appear to characterize the low frequency category in the 1949 cohort, i.e., they failed to meet even the .1 standard for inclusion.

In the high frequency categories for the combined period, the discriminant analyses results are generally not as consistent or clear-cut as they were for the

TABLE 7 . A COMPARISON OF DISCRIMINANT ANALYSIS RESULTS FOR ALTERNATIVE DEFINITIONS OF HIGH AND LOW CONTACT FREQUENCY CATEGORIES FOR THE COMBINED PERIOD, BY COHORT

| 1942 | | | | 1949 | | | |
|---|---|---|---|---|---|---|---|
| Low Frequency | | High Frequency | | Low Frequency | | High Frequency | |
| 0-4 | | 5 or More | | 0-4 | | 5 or More | |
| Variable | Standardized Coefficient | Variable | Standardized Coefficient | Variable | Standardized Coefficient | Variable | Standardized Coefficient |
| WORKED | .291 | EDUC | -.247 | (None) | --- | ATTIPOL | -.266 |
|  |  | JFRIENDS | -.377 |  |  | JFRIENDS | -.392 |
| $W^2=.296$ | | | | $W^2=.365$ | | | |
| 0-3 | | 4 or More | | 0-3 | | 4 or More | |
| WORKED | .352 | EDUC | -.200 | (None) | --- | ATTIPOL | -.293 |
|  |  | JFRIENDS | -.310 |  |  | JFRIENDS | -.258 |
|  |  | STATOCC1 | -.267 |  |  | RESIDENC | -.208 |
| $W^2=.294$ | | | | $W^2=.314$ | | LVHOME | -.209 |
| 0-2 | | 3 or More | | 0-2 | | 3 or More | |
| WORKED | .372 | JFRIENDS | -.231 | (None) | --- | ATTIPOL | -.361 |
|  |  | STATOCC1 | -.303 |  |  | JFRIENDS | -.228 |
|  |  | RESIDENC | -.280 |  |  |  |  |
|  |  | ATTIPOL | -.270 |  |  |  |  |
| $W^2=.310$ | | | | $W^2=.419$ | | | |
| 0-1 | | 2 or More | | 0-1 | | 2 or More | |
| WORKED | .486 | STATOCC1 | -.289 | WORKED | .350 | ATTIPOL | -.243 |
| CHILDREN | .344 | RESIDENC | -.271 |  |  | STATOCC1 | -.286 |
|  |  | ATTIPOL | -.220 |  |  | EDUC | -.214 |
| $W^2=.297$ | | | | $W^2=.305$ | | | |
| 0 | | 1 or More | | 0 | | 1 or More | |
| CHILDREN | .269 | STATOCC1 | -.277 | WORKED | .344 | STATOCC1 | -.256 |
| WORKED | .454 | AUTO | -.315 | HSWORK | .257 | RESIDENC | -.215 |
|  |  |  |  | ATTISCHL | .310 | AUTO | -.287 |
|  |  |  |  |  |  | TIES6-13 | -.206 |
| $W^2=.235$ | | | | $W^2=.180$ | | | |

component periods. In the 1942 cohort, low status of first full-time occupation is most clearly characteristic at most levels of high frequency. Having had juvenile friends in serious trouble with the law is characteristic at higher levels of high frequency, as is lower educational attainment. Low status of residential area and a negative attitude toward the police are characteristic at low-to-middle levels of high frequency.

In the 1949 cohort, the high frequency category is most frequently epitomized by a negative attitude toward the police. At higher levels of high frequency, members of this category are more likely to have had juvenile friends in serious trouble with the law. Finally, low status of first full-time occupation is characteristic at lower levels of high frequency.

Except for extent of juvenile friends' trouble with the law, there is little cross-cohort similarity of characteristic variables for the combined period. It should be noted that although the characteristic variables for the combined period show less consistency than during the component variables, the size of $W^2$ tends to be slightly elevated compared to this period. That is, there is a tendency for greater predictability to occur for the combined than respective component periods. In the 1942 cohort, $W^2$ ranges from a low of 23.5% to a high of 31.0%. For the 1949 cohort, the $W^2$ range is 18.0% to 41.9%.

## Conclusions

The results indicate that what is characteristic of individuals who have low or high frequency contacts with the law varies depending 1) on the way in which low-high are operationalized, and 2) the age period under consideration. Although there is an indication that at least some variables tend to characterize the low or high frequency group regardless of how these groups are defined, there is still a good deal of variability in characteristic variables

as the relative definition of low and high changes. It must be reiterated, then, that classification of individuals on the basis of frequency of contact with the police is an essentially arbitrary enterprise. Whatever category system is established must therefore be related to the needs of the researchers. Moreover, this arbitrariness extends over age periods. A classification system that is used for adults will not necessarily be a useful one for preadults. This implies that the characteristics of those in, for example, a high frequency as a preadult, will differ from the characteristics of individuals in a high frequency category as an adult. That is, the meaning of high (or low) frequency will vary across age categories.

## Seriousness Categories

In this section, the results of three discriminant analyses utilizing varying definitions of offense seriousness are presented for each age period and cohort. The objective here is to determine if there is an empirical basis for classifying individuals on the basis of seriousness of a police contact career. In the first analysis, an attempt is made to distinguish between individuals who have at least one felony in their police contact career and those who have a career consisting only of non-felonies. The second analysis distinguishes between individuals who had at least one FBI Part I offense in their career and those who had other than Part I offense careers. Finally, the third analysis distinguishes between those whose careers consisted of non-traffic offenses and those whose careers consisted of contacts for 1) traffic violations, 2) juvenile status offenses, 3) contacts for suspicion or investigation, and 4) no contacts.

## Felony and Nonfelony Groups

### Preadult Period

Table 8 presents a cross-cohort comparison of the characteristic variables for the felony-nonfelony categories for the three age periods. In the preadult period, only one variable appears as characteristic of the 1942 and 1949 non-felony groups. In the 1942 cohort, the variable is group ties for the period between ages 14 and 17. Members of the nonfelony group were less likely to be tied to a single group during these ages. In the 1949 cohort, members of the nonfelony group were more likely to have had a negative attitude toward school.

As with the frequency categories above, most of the variables turn out to be characteristic of the more serious groups while relatively few are characteristic of the non-serious categories. The felony groups for the 1942 and 1949 cohorts in the preadult period have several variables in common, specifically 1) coming from a lower status residential area, 2) having a negative attitude toward the police, 3) having friends in relatively serious trouble with the law, and 4) being less tied to a single group. Beyond this, the groups tend to differ. The 1942 group is also characterized by persons who reported delinquencies for which they were never caught, a higher age at the time of first full-time occupation, and having received more negative influences from significant others during their youth. In contrast, the 1949 felony group is further characterized by greater automobile use.

The discriminant function in the 1942 cohort accounts for 21% ($W^2 = .207$) of the variance in group membership while it is about 16% ($W^2 = .164$) in the 1949 cohort. Note that $W^2$ is not significant for the 1942 group but is significant for the 1949 cohort.

TABLE 8. CHARACTERISTIC VARIABLES AND STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS FOR NONFELONY AND FELONY CATEGORIES, BY COHORT AND AGE PERIOD

**PREADULT**

| Non-felony | | | | Felony | | | |
|---|---|---|---|---|---|---|---|
| 1942 | | 1949 | | 1942 | | 1949 | |
| TIES14-17 | .416 | ATTISCHL | .219 | *RESIDENC* | -.230 | *RESIDENC* | -.347 |
| | | | | *ATTIPOL* | -.317 | *ATTIPOL* | -.235 |
| | | | | *JFRIENDS* | -.697 | *JFRIENDS* | -.250 |
| | | | | *TIES6-13* | -.237 | *TIES6-13* | -.394 |
| | | | | DELINQ | -.204 | AUTO | -.268 |
| | | | | AGEOCC1 | -.226 | | |
| | | | | NEGAT | -.287 | | |
| $W^2 = .207$** | | $W^2 = .164$* | | | | | |

**ADULT**

| 1942 | | 1949 | | 1942 | | 1949 | |
|---|---|---|---|---|---|---|---|
| TIES14-17 | .492 | *TIES18-20* | .347 | *TIES18-20* | -.406 | STATOCC1 | -.219 |
| | | *AFRIENDS* | .267 | *AFRIENDS* | -.262 | HHSTATUS | -.281 |
| | | *FAMILY* | .306 | *FAMILY* | -.302 | RESIDENC | -.397 |
| | | *CHILDREN* | .249 | *CHILDREN* | -.295 | AUTO | -.220 |
| | | AGEOCC1 | .354 | INCOME | -.239 | JFRIENDS | -.297 |
| | | | | ATTIPOL | -.244 | WORKED | -.203 |
| | | | | LVHOME | -.311 | PRESOCC | -.222 |
| | | | | EDUC | -.204 | *TIES6-13* | -.233 |
| $W^2 = .191$** | | $W^2 = .212$** | | | | | |

**COMBINED**

| 1942 | | 1949 | | 1942 | | 1949 | |
|---|---|---|---|---|---|---|---|
| TIES14-17 | .463 | ATTISCHL | .236 | *RESIDENC* | -.225 | *RESIDENC* | -.336 |
| | | AGEOCC1 | .219 | *ATTIPOL* | -.466 | *ATTIPOL* | -.200 |
| | | | | *JFRIENDS* | -.443 | *JFRIENDS* | -.321 |
| | | | | FAMILY | -.224 | AUTO | -.243 |
| | | | | ATTISCHL | -.236 | *TIES6-13* | -.362 |
| | | | | TIES18-20 | -.335 | | |
| $W^2 = .208$** | | $W^2 = .197$* | | | | | |

\* p<.01
\*\* p>.01

## Adult Period

Again, as with the frequency category analysis, the adult period shows less cross-cohort consistency than the preadult period. And again this may be attributed to the fact that 1949 cohort members have been adults for a shorter period than their 1942 counterparts.

During the adult period, the 1942 nonfelony group is characterized by being less tied to a single group during ages 14 to 17. In contrast, the 1949 nonfelony group is characterized by fewer single group ties between the ages of 18 and 20. Additionally, members of this group were more likely to have had adult friends in serious trouble with the law, to have come from a large family, to come from a less intact family, and to have been older at the time of first full-time employment.

The 1942 and 1949 felony groups do not have even one variable in common. What is interesting to note, however, is that four variables are common to the 1949 nonfelony group and 1942 felony category, i.e., ties during the 18-20 age period, extent of adult friends trouble with the law, family intactness, and number of children. That the same variables characterize a felony and non-felony group while none are comparable across cohorts within the felony category illustrates the difficulty of establishing racial, reliable discriminators.

The $W^2$ values for the 1942 and 1949 cohorts are .191 (p=.650) and .212 (p=.054), respectively. Thus, for the adult period the discriminant function is not significant in the 1942 cohort and approaches significance in the 1949 cohort.

## Combined Period

For the 1942 nonfelony group, the group ties variable for the age period 14 to 17 is characteristic as it was in the component periods. It is thus a

consistent discriminator for this particular cohort and seriousness category. In the 1949 cohort, a negative attitude toward school and a higher age at the time of first full-time occupation are characteristic. There are obviously no cross-cohort similarities in the nonfelony category.

In the combined period felony categories, the 1942 and 1949 cohorts have three variables in common: 1) coming from a low status residential area as juveniles, 2) having a negative attitude toward the police, and 3) having had friends as a juvenile who were in relatively serious trouble with the law. Additionally, the 1942 members of the felony category came from less intact families, had a negative attitude toward school, and were less tied to a single group during the 18 to 20 age period. In the 1949 cohort, frequent automobile use and being less tied to a single group at ages 6 through 13 further typify the felony category.

It is interesting to observe that the pattern of group ties bears a fairly consistent relationship to membership to the seriousness categories. Members of the felony category were less tied to a single group during either the 6 to 13 or 18 to 20 age periods, depending on cohort. However, members of the nonfelony category were invariably less tied to a single group during the 14 to 17 age period. This suggests an interaction between seriousness category membership and group ties over age periods. That is, the kind of group ties one has and their relationship to membership in either the felony or nonfelony categories depends on which age category one is in. This is an issue that should perhaps be explored further.

The respective discriminant functions for the 1942 and 1949 cohorts account for 20.8% ($W^2$=.208) and 19.7% ($W^2$=.197) of the variance in group membership.

## Part 1 and Non-Part 1 Groups

### Preadult Period

There is some cross-cohort similarity of variables for the non-Part 1 groups. (Table9).In the 1942, group ties at ages 14 to 17 is a characteristic variable while in the 1949 cohort it is group ties during the 18 to 20 period. In both cases, group members were less tied to a single group during the specified age periods. The absence of employment is also characteristic of members of the non-Part 1 group. In the 1942 cohort, it is the relative absence of employment of the head of household during an individual's preadult period that is characteristic of being a non-Part 1 group member. However, for the 1949 cohort, it is the relative absence of employment of the cohort members themselves during high school that is characteristic.

Part 1 individuals in both cohorts have three variables in common: 1) leaving home at a younger age, 2) marrying at an older age, and 3) having a negative attitude toward the police. The 1942 Part 1 group is further characterized by coming from families with a large number of children living in a low status residential area, more frequent automobile use, and having friends in relatively serious trouble with the law.

The discriminant function for the 1942 cohort accounts for 17.6% of the variance in group membership but this is a non-significant value. For the 1949 cohort, $W^2 = 23.1\%$ and is significant.

### Adult Period

During the adult period, both the 1942 and 1949 non-Part 1 groups are characterized by ties to a single group during the 14 to 17 year age period. For the 1949 cohort, higher age at the time of first full time occupation and coming from a neighborhood heavily patrolled by the police are additional typifying variables.

TABLE 9. CHARACTERISTIC VARIABLES AND STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS FOR NON-PART 1 AND PART 1 CATEGORIES, BY COHORT AND AGE PERIOD

PREADULT

| Non-Part 1 | | | | Part 1 | | | |
|---|---|---|---|---|---|---|---|
| 1942 | | 1949 | | 1942 | | 1949 | |
| TIES14-17 | .259 | TIES18-20 | .147 | LVHOME | -.217 | LVHOME | -.382 |
| HHEMP | .281 | HSWORK | .103 | AGEMARRY | -.202 | AGEMARRY | -.346 |
| | | | | ATTIPOL | -.253 | ATTIPOL | -.566 |
| | | | | CHILDREN | -.296 | | |
| | | | | RESIDENC | -.494 | | |
| | | | | AUTO | -.221 | | |
| | | | | JFRIENDS | -.441 | | |
| W = .176** | | W = .231* | | | | | |

ADULT

| 1942 | | 1949 | | 1942 | | 1949 | |
|---|---|---|---|---|---|---|---|
| TIES14-17 | .203 | TIES14-17 | .270 | RESIDENC | -.297 | RESIDENC | -.329 |
| | | AGEOCC1 | .343 | ATTIPOL | -.269 | ATTIPOL | -.308 |
| | | PATROL | .311 | AUTO | -.334 | LVHOME | -.241 |
| | | | | EDUC | -.258 | WORKED | -.255 |
| | | | | ATTISCHL | -.435 | PRESOCC | -.347 |
| | | | | AGEMARRY | -.203 | TIES6-13 | -.247 |
| | | | | CHILDREN | -.250 | | |
| | | | | HHEMP | -.258 | | |
| $W^2 = .240**$ | | $W^2 = .278*$ | | | | | |

COMBINED

| 1942 | | 1949 | | 1942 | | 1949 | |
|---|---|---|---|---|---|---|---|
| PRESOCC | .278 | WORKED | .197 | LVHOME | -.263 | LVHOME | -.288 |
| | | STATOCC1 | .118 | STATOCC1 | -.202 | ATTIPOL | -.492 |
| | | | | CHILDREN | -.282 | TIES6-13 | -.222 |
| | | | | POSIT | -.203 | | |
| | | | | RESIDENC | -.392 | | |
| | | | | AUTO | -.295 | | |
| | | | | JFRIENDS | -.422 | | |
| $W^2 = .235*$ | | $W^2 = .272*$ | | | | | |

* p<.01
** p>.01

Within the Part 1 category, two variables are common across cohorts, coming from a low status residential area and having a negative attitude toward the police. The remaining variables are unique to each cohort.

The amount of variance explained in the 1942 cohort is 24% but non-significant. For the 1949 cohort, $W^2$ is nearly 28% and significant.

### Combined Period

In the combined period, the 1942 non-Part 1 category is characterized only by low status of present occupation. The non-Part 1 group in the 1949 cohort is characterized by having worked relatively little since completing one's education and having had a low status first occupation. All three variables are economically related. And, again, it is being marginal to the economic sphere that appears to be related to membership in the lesser of the seriousness categories.

Within the Part 1 category, only one variable, leaving home at an early age, is characteristic across cohorts. The remaining variables are unique to each cohort. In the 1949 cohort, being less tied to a single group during the 6 to 13 age period and having a negative attitude toward the police are characteristic variables. In the 1942 cohort, low status of first full time occupation, coming from a large family, receiving a larger number of positive influences from significant others, coming from a low status neighborhood, frequent automobile use, and having had friends in relatively serious trouble with the law are characteristic of the Part 1 category.

The respective discriminant functions for the 1942 and 1949 cohort account for 23.5% and 27.2% of the variance in group membership.

It is noteworthy that status of first full time occupation is characteristic of the non-Part 1 category in the 1949 cohort, but in the 1942 cohort it characterizes the Part 1 group.

### Criminal and Noncriminal Groups

### Preadult Period

A cross-cohort comparison of the non-criminal groups for the preadult period indicates no comparability at all (Table 10). The 1942 cohort is once again characterized by group ties during the 14 to 17 age period while the 1949 cohort members are characterized by their attitude toward school, age at the time of first full time occupation, positive influences from significant others during the preadult period, regularity of employment of household head, a desire for personal change. Among the 1942 and 1949 criminal groups, only the variable, attitude toward the police, is consistent across cohorts. The $W^2$ values for both cohorts are significant. In the 1942 cohort, 18% of the variance is accounted for and in the 1949 cohort, the comparable figure is 23%.

### Adult Period

During the adult period, the 1942 noncriminal group is characterized by group ties at age 14 to 17, a carry over from the preadult period. Additionally, coming from a heavily patrolled neighborhood and having worked less than regularly since completing one's education epitomize members of this group. The 1949 noncriminal group is typified, only by the less than regular employment of the household head in one's family of orientation. Among the criminal group, the frequent use of an automobile is consistent across cohorts. No other variables appear in common across cohorts.

The respective discriminant functions account for 26% (1942) and 22% (1949) of the variability in group membership, both of which are significant.

### Combined Period

In the combined period, there is somewhat more cross-cohort comparability of characteristic variables than in the component periods. In the noncriminal

TABLE 10. CHARACTERISTIC VARIABLES AND STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS FOR NONCRIMINAL AND CRIMINAL CATEGORIES, BY COHORT AND AGE PERIOD.

**PREADULT**

| Noncriminal | | | | Criminal | | | |
|---|---|---|---|---|---|---|---|
| 1942 | | 1949 | | 1942 | | 1949 | |
| TIES14-17 | .464 | ATTISCHL | .108 | *ATTIPOL* | -.407 | *ATTIPOL* | -.410 |
| | | AGEOCC1 | .138 | LVHOME | -.221 | EDUC | -.231 |
| | | POSIT | .135 | AGEMARRY | -.346 | JFRIENDS | -.436 |
| | | HHEMP | .131 | HHSTATUS | -.245 | | |
| | | PERCHANG | .106 | AUTO | -.496 | | |
| | | | | TIES6-13 | -.352 | | |
| $W^2 = .181*$ | | $W^2 = .229*$ | | | | | |

**ADULT**

| 1942 | | 1949 | | 1942 | | 1949 | |
|---|---|---|---|---|---|---|---|
| TIES14-17 | .212 | HHEMP | .217 | *AUTO* | -.224 | *AUTO* | -.232 |
| WORKED | .387 | | | ATTIPOL | -.224 | CHILDREN | -.313 |
| PATROL | .239 | | | RESIDENC | -.414 | JFRIENDS | -.345 |
| | | | | HHSTATUS | -.229 | INCOME | -.236 |
| | | | | FAMILY | -.277 | PRESOCC | -.261 |
| | | | | ATTISCHL | -.250 | | |
| $W^2 = .262*$ | | $W^2 = .218*$ | | | | | |

**COMBINED**

| 1942 | | 1949 | | 1942 | | 1949 | |
|---|---|---|---|---|---|---|---|
| *WORKED* | .468 | *WORKED* | .172 | *AUTO* | -.284 | *AUTO* | -.299 |
| PERCHANG | .247 | AGEMARRY | .173 | *RESIDENC* | -.442 | *RESIDENC* | -.248 |
| | | HSWORK | .122 | | | ATTIPOL | -.334 |
| $W^2 = .323*$ | | $W^2 = .270*$ | | | | | |

* p<.01

category, having worked relatively little since completing one's education becomes a simultaneous characteristic variable. However, the remaining variables, desire for personal change in the 1942 cohort and age at marriage and amount of time worked during the high school period, are not consistent over cohorts.

Within the criminal category, high frequency of automobile use and coming from a low status residential area are characteristics that occur across cohorts. For the 1949 cohort, a negative attitude toward the police is also typifying.

The amount of explained variance in the 1942 cohort is 32% and, for the 1949 cohort, 27% (p<.01). These values are higher than those found in the respective component periods.

### Discussion

The results of the discriminant analysis for the various operationalizations of career seriousness indicate several points worth mentioning. First, they show the difficulty of achieving cross-cohort comparability of results. The two cohorts are more often distinct from one another within categories of seriousness. Yet there is some degree of similarity between the cohorts which is most apparent within the more serious category of a dichotomous pair. Within the felony-nonfelony distinction, and over age periods, status of residential area, attitude toward the police, extent of juvenile friends' trouble with the law, and group ties during ages 6 to 13 are the dimensions along which the cohorts are most likely to be in agreement. However, for the Part 1-Non-Part 1 distinction, the dimensions of cross-cohort agreement are group ties during ages 14 through 17, age at which the individual left home,

age at marriage, attitude toward the police, and status of residential area. Finally, for the criminal-noncriminal categories the important dimensions of agreement are amount of time worked since completing one's education, attitude toward the police, extent of automobile use, and status of residential area. These dimensions are summarized in Table 11 . Finally, it should be noted that across seriousness types, attitude toward the police and status of residential area appear in common.

A second issue raised by the results is that the characteristic variables differ according to the definition of seriousness that one uses. That is, the variables characterizing the felony category are frequently not the same ones that characterize the Part 1 or criminal categories. The same holds, of course, for the nonfelony, non-Part 1, and noncriminal categories. The degree of correspondence between the definitions of seriousness is given in Table 12a which reorganizes the characteristic variables found in Tables 8 through 10 (for brevity, the standardized coefficients are omitted here). Within age categories and cohorts, there is relatively little overall consistency of characteristic variables over differing definitions of non-serious categories (nonfelonies, non-Part 1, and noncriminal groups). However, in the 1942 cohort, for both the preadult and adult periods, group ties at age 14 through 17 does stand out as being a consistent characteristic.

Table 12b presents a similar within-cohort and age comparision for the more serious of the seriousness categories (felony, Part 1, and criminal groups). Within the preadult period, attitude toward police is consistently character-istic over all three seriousness categories and in both cohorts. Also in this age period, in the 1942 cohort, status of residential area, extent of juvenile friends' trouble with the law, group ties at ages 6-13, automobile use, age at which the individual left home, and age at marriage are characteristic

TABLE 11. DIMENSIONS OF CROSS-COHORT SIMILARITY, BY SERIOUSNESS DISTINCTIONS

| Felony vs. Nonfelony | Part 1 vs. NonPart 1 | Criminal vs. Noncriminal |
|---|---|---|
| RESIDENC | RESIDENC | RESIDENC |
| ATTIPOL | ATTIPOL | ATTIPOL |
| JFRIENDS | | |
| TIES6-13 | | |
| | TIES14-17 | |
| | LVHOME | |
| | AGEMARRY | |
| | | WORKED |
| | | AUTO |

**TABLE 12a.  SIMILARITY OF CHARACTERISTIC VARIABLES ACROSS SERIOUSNESS CATEGORIES, BY COHORT AND AGE PERIOD**

PREADULT

| | NONFELONY | NON-PART 1 | NONCRIMINAL |
|---|---|---|---|
| 1942 | *TIES14-17* | *TIES14-17*<br>HHEMP | *TIES14-17* |
| 1949 | *ATTISCHL* | | *ATTISCHL* |
| | | TIES18-20<br>HSWORK | |
| | | | HHEMP<br>AGEOCC1<br>POSIT<br>PERCHANG |

ADULT

| | NONFELONY | NON-PART 1 | NONCRIMINAL |
|---|---|---|---|
| 1942 | *TIES14-17* | *TIES14-17* | *TIES14-17*<br>PATROL<br>WORKED |
| 1949 | TIES18-20<br>AFRIENDS<br>FAMILY<br>CHILDREN<br>*AGEOCC1* | *AGEOCC1*<br>PATROL | |
| | | | HHEMP |

COMBINED

| | NONFELONY | NON-PART 1 | NONCRIMINAL |
|---|---|---|---|
| 1942 | TIES14-17 | | |
| | | PRESOCC | |
| | | | PERCHANG<br>WORKED |
| 1949 | ATTISCHL<br>AGEOCC1 | | |
| | | STATOCC1<br>*WORKED* | *WORKED*<br>AGEMARRY<br>HSWORK |

---

**TABLE 12b.  SIMILARITY OF CHARACTERISTIC VARIABLES ACROSS SERIOUSNESS CATEGORIES FOR PREADULT PERIOD, BY COHORT**

PREADULT

| | FELONY | PART 1 | CRIMINAL |
|---|---|---|---|
| 1942 | *ATTIPOL*<br>*RESIDENC*<br>*JFRIENDS*<br>*TIES6-13*<br>DELINQ<br>AGEOCC1<br>NEGAT | *ATTIPOL*<br>*RESIDENC*<br>*JFRIENDS* | *ATTIPOL*<br><br>*TIES6-13* |
| | | *AUTO*<br>*LVHOME*<br>*AGEMARRY* | *AUTO*<br>*LVHOME*<br>*AGEMARRY*<br>HHSTATUS |
| 1949 | *ATTIPOL*<br>*JFRIENDS*<br>RESIDENC<br>TIES6-13<br>AUTO | *ATTIPOL* | *ATTIPOL*<br>*JFRIENDS* |
| | | AGEMARRY<br>LVHOME | |
| | | | EDUC |

A D U L T

| | FELONY | PART 1 | CRIMINAL |
|---|---|---|---|
| 1942 | *ATTIPOL* | *ATTIPOL* | *ATTIPOL* |
| | *CHILDREN* | *CHILDREN* | |
| | *FAMILY* | | *FAMILY* |
| | AFRIENDS | | |
| | INCOME | | |
| | TIES18-20 | | |
| | LVHOME | | |
| | *EDUC* | *EDUC* | |
| | | *RESIDENC* | *RESIDENC* |
| | | *AUTO* | *AUTO* |
| | | *ATTISCHL* | *ATTISCHL* |
| | | AGEMARRY | |
| | | HHEMP | |
| | | | HHSTATUS |
| 1949 | *PRESOCC* | *PRESOCC* | *PRESOCC* |
| | *WORKED* | *WORKED* | |
| | *RESIDENC* | *RESIDENC* | |
| | *AUTO* | | *AUTO* |
| | *JFRIENDS* | | *JFRIENDS* |
| | HHSTATUS | | |
| | STATOCC1 | | |
| | *TIES6-13* | *TIES6-13* | |
| | | ATTIPOL | |
| | | LVHOME | |
| | | | CHILDREN |
| | | | INCOME |

C O M B I N E D

| | FELONY | PART 1 | CRIMINAL |
|---|---|---|---|
| 1942 | *RESIDENC* | *RESIDENC* | *RESIDENC* |
| | ATTIPOL | | |
| | JFRIENDS | | |
| | FAMILY | | |
| | ATTISCHL | | |
| | TIES18-20 | | |
| | AUTO | AUTO | AUTO |
| | LVHOME | | |
| | STATOCC1 | | |
| | CHILDREN | | |
| | POSIT | | |
| 1949 | *ATTIPOL* | *ATTIPOL* | *ATTIPOL* |
| | *RESIDENC* | | *RESIDENC* |
| | *AUTO* | | *AUTO* |
| | *TIES6-13* | *TIES6-13* | |
| | *JFRIENDS* | | |
| | | LVHOME | |

for two out of three definitions of seriousness. During the adult period (Table 12c) attitude toward police is consistently characteristic across seriousness categories in the 1942 cohort with number of children, family intactness, educational attainment, status of residential area, automobile use, and attitude toward school being characteristic in two out of three definitions. For the adult period in the 1949 cohort, status of present occupation is consistently characteristic over all three seriousness definitions. The following variables are characteristic only in two of the three categories: amount of time worked since completion of education, status of residential area, automobile use, and extent of juvenile friends' trouble with the law. Finally, for the combined group (Table 12d) status of residential area for all three categories and automobile use for two categories are consistent in the 1942 cohort. For the 1949 cohort, attitude toward police is characteristic in all three cases while status of residential area, automobile use, and group ties at age 6-13 are typical in two out of three cases.

These results suggest that the varying definitions of seriousness used here are different from one another, e.g., that members of the felony group are different from members of the Part 1 group. But at the same time, all share at least one variable in common, implying at least a small degree of similarity within an age period and cohort.

A third and final issue raised by the discriminant analysis results is that the characteristic variables vary by age period. Within cohorts and seriousness categories, what is a typifying variable at the preadult level is not the same as for the adult period (see Tables 13a, b, c). For the felony-nonfelony categories (Table 13a), group ties during ages 14 to 17 (nonfelony) and attitude toward the police (felony) are consistent across age

TABLE 13a. SIMILARITY OF CHARACTERISTIC VARIABLES ACROSS AGE PERIODS, BY COHORT AND FELONY-NONFELONY SERIOUSNESS CATEGORIES

N O N F E L O N Y

|  | PREADULT | ADULT | COMBINED |
|---|---|---|---|
| 1942 | *TIES14-17* | *TIES14-17* | *TIES14-17* |
| 1949 | *ATTISCHL* | AGEOCC1 TIES18-20 AFRIENDS FAMILY CHILDREN | *ATTISCHL AGEOCC1* |

F E L O N Y

|  | PREADULT | ADULT | COMBINED |
|---|---|---|---|
| 1942 | *ATTIPOL RESIDENC JFRIENDS* TIES6-13 DELINQ AGEOCC1 NEGAT | *ATTIPOL* | *ATTIPOL RESIDENC JFRIENDS* |
|  |  | TIES18-20 FAMILY AFRIENDS CHILDREN INCOME LVHOME EDUC | *TIES18-20 FAMILY* |
|  |  |  | *ATTISCHL* |
| 1949 | *RESIDENC JFRIENDS TIES6-13 AUTO ATTIPOL* | *RESIDENC JFRIENDS TIES6-13 AUTO* | *RESIDENC JFRIENDS TIES6-13 AUTO ATTIPOL* |
|  |  | STATOCC1 HHSTATUS WORKED PRESOCC |  |

TABLE 13b. SIMILARITY OF CHARACTERISTIC VARIABLES ACROSS AGE
PERIODS, BY COHORT AND PART 1-NON-PART 1 SERIOUSNESS
CATEGORIES

### NON-PART 1

| | PREADULT | ADULT | COMBINED |
|---|---|---|---|
| 1942 | *TIES14-17*<br>HHEMP | *TIES14-17* | |
| | | | PRESOCC |
| 1949 | TIES18-20<br>HSWORK | | |
| | | TIES14-17<br>AGEOCC1<br>PATROL | |
| | | | WORKED<br>STATOCC1 |

### PART 1

| | PREADULT | ADULT | COMBINED |
|---|---|---|---|
| 1942 | *AUTO*<br>*RESIDENC*<br>*CHILDREN*<br>*ATTIPOL*<br>*AGEMARRY*<br>*LVHOME*<br>*JFRIENDS* | *AUTO*<br>*RESIDENC*<br>*CHILDREN*<br>*ATTIPOL*<br>*AGEMARRY* | *AUTO*<br>*RESIDENC*<br>*CHILDREN*<br><br>*LVHOME*<br>*JFRIENDS* |
| | | EDUC<br>ATTISCHL<br>HHEMP | |
| | | | STATOCC1<br>POSIT |
| 1949 | LVHOME<br>ATTIPOL<br>AGEMARRY | LVHOME<br>ATTIPOL | *LVHOME*<br>*ATTIPOL* |
| | | *TIES6-13*<br>RESIDENC<br>WORKED<br>PRESOCC | *TIES6-13* |

TABLE 13c. SIMILARITY OF CHARACTERISTIC VARIABLES ACROSS AGE
PERIODS, BY COHORT AND CRIMINAL-NONCRIMINAL SERIOUSNESS
CATEGORIES

### NONCRIMINAL

| | PREADULT | ADULT | COMBINED |
|---|---|---|---|
| 1942 | *TIES14-17* | *TIES14-17*<br>*WORKED*<br>PATROL | *WORKED* |
| | | | PERCHANG |
| 1949 | *HHEMP*<br>AGEOCC1<br>POSIT<br>PERCHANG<br>ATTISCHL | *HHEMP* | |
| | | | WORKED<br>AGEMARRY<br>HSWORK |

### CRIMINAL

| | PREADULT | ADULT | COMBINED |
|---|---|---|---|
| 1942 | *AUTO*<br>*ATTIPOL*<br>*HHSTATUS*<br>LVHOME<br>AGEMARRY<br>TIES6-13 | *AUTO*<br>*ATTIPOL*<br>*HHSTATUS* | *AUTO* |
| | | *RESIDENC* | *RESIDENC* |
| 1949 | *JFRIENDS*<br>*ATTIPOL*<br>EDUC | *JFRIENDS* | *ATTIPOL* |
| | | *AUTO*<br>CHILDREN<br>INCOME<br>PRESOCC | *AUTO* |
| | | | RESIDENC |

periods in the 1942 cohort. In the 1949 <u>felony</u> category, status of residential area, extent of juvenile friends' trouble with the law, group ties for the 6-13 age period, and automobile use occur in common across age period.

In Table 13b, there is relatively little or no cross-age period similarity in characteristic variables in the 1942 and 1949 cohorts for the non-Part 1 category. However, the findings for the 1942, Part 1 category indicate that automobile use, status of residential area, and number of children are characteristic across all age periods. In the 1949 cohort, age at which the individual left home and attitude toward the police are characteristic across age periods.

Finally, Table 13c shows relatively little commonality of characteristics across age periods for either the cohorts or seriousness categories.

## Conclusions

The analysis undertaken here was intended to determine if there is a basis for developing empirical typologies of crime using frequency of contact with the law and seriousness of contact as the underlying dimensions. The results seem to indicate that creating such typologies is a difficult task. On one hand, the findings indicate relatively little cross-cohort comparability on either the frequency or seriousness dimensions. For example, what is characteristic of a high frequency of contact individual in the 1942 cohort is not characteristic of a member of the same category in the 1949 cohort. This suggests that typologies have the tendency to be temporally constrained, depending on the historical period in which they are created. A typology established at one point in time will not necessarily be useful at another point in time.

Another seemingly important result is that the categories established for a typology will always tend to be somewhat arbitrary and must therefore be linked to the needs of the researcher. There does not appear to be an empirical basis for saying that a system which distinguishes frequency of contact on the basis of two categories is more useful than one based on four categories, e.g., high vs. low frequency is not much different from lowest vs. low vs. high vs. highest. Further, in a number of dichotomous frequency categories examined here, each appeared to be distinct from the others, thus supporting the contention that classification is an arbitrary matter. A similar conclusion can be reached when a typology is based in seriousness, rather than frequency, categories. Each of those examined here were essentially different from the others, e.g., a member of a felon category is not the same as a Part 1 category member. Again, whatever system is used must be related to the goals of the research at hand. Any conclusions reached on the basis of a given typological system will, in all likelihood, be different from those reached when another system is used.

Footnotes

[1]  The procedures involved in amassing data on official police contact careers for cohort members have been described elsewhere (Shannon, 1976).

[2]  The selection of independent variables has also been described elsewhere (Olson, 1978).

[3]  The rationale for creating a preadult period that extends to age 20 rather than the more typical age of 17 (Cavan and Ferdinand, 1975) lies in the inconsistencies in existing age norms (Bengston and Laufer, 1974a,b; Riley, 1976). For example, although one may be an adult from the standpoint of criminal law at age 18, there are other spheres of life in which adulthood does not occur until age 21 (e.g., entering into a legal contract). Thus, between age 18 and 21, individuals may be treated as adults under some conditions but not others. The transition to adulthood occurs gradually until 21 at which time all legal entitlements are granted. Consequently, there is justification for making this age period longer than is normally the case.

[4]  The text of the report will be concerned only with a presentation of results based on the first discriminant function. One argument for proceeding in this way is that although the findings indicate a second significant function in the 1949 cohort (but not a third one), this is not true in the 1942 cohort--all functions beyond the first one are nonsignificant. Hence, there is no basis for cross-cohort comparison. Further, it is argued that the statistical significance of a second discriminant function in the 1949 cohort is primarily a consequence of the relatively large number of cases available compared to the 1942 cohort. Even a relatively small increase in explained variance becomes significant under these circumstances.

[5]  It should be reiterated that on any discriminant function, a centroid value is calculated for each group. On Function 1 for the 1942 cohort, these values are .397 (Group 1), .019 (Group 2), -.393 (Groups 3), and -1.313 (Group 4). On a continuum, the groups may be plotted roughly as follows:
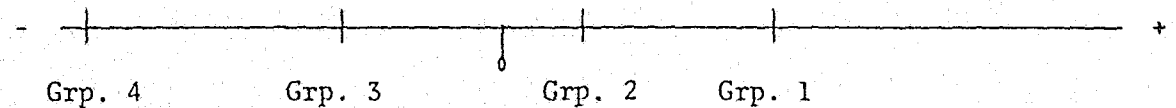


The interpretive procedure is to contrast the two groups having the most discrepant centroids and ignore the others. Thus, Function 1 maximally discriminates between Groups 1 and 4 here. This rule is modified if two centroids, relative to a third one, lie close together on the continuum, e.g., if the centroid for Group 2 above was on the order of .350 and all others retained their present magnitude. In this situation, Groups 1 and 2 would be maximally distinct from Group 4 but nearly identical to each other. In turn, this suggests that Groups 1 and 2 are recombinable into a single group that can be compared to Group 4. Other interpretive rules are found in the text.

[6]  In order to simplify the data presentation, characteristic variables will be defined as those having standardized discriminant function coefficients of at least .2. These are the variables which contribute the most to the explanatory power of the function. If none of the variables associated with a group meets the .2 criterion, then a value of .1 was substituted. In general, the higher the coefficient, the more important ("characteristic") a variable is relative to the others in the equation. The presentation of unstandardized coefficients would have little meaning here since the "dependent variable" (group membership) is categoric.

[7]  Several of the independent variables have been "reverse coded" so that a high score or code actually indicates a low "real" score. The correct interpretation is given in the text and can be checked against the coding scheme in Table 1.

[8]  The centroids for each group are as follows:  .475 (Group 1), .296 (group 2), -.258 (Group 3), and -1.353 (Group 4). Their patterning on the continuum is similar to that for the 1942 cohort.

[9]  The centroids for Function 1 for the 1942 cohort in the adult period are: .317 (Group 1), .169 (Group 2), -.333 (Group 3), and -1.374 (Group 4). For the 1949 cohort, they are (in the same order):  .289, .082, -.767, and -1.557.

[10]  The centroids for the 4 groups in the 1942 cohort are as follows: .628 (Group 1), .248 (Group 2), -.186 (Group 3), and -.963 (Group 4). For the 1949 cohort, they are:  .518 (Group 1), .445 (Group 2), -.064 (Group 3), and -1.141 (Group 4).

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