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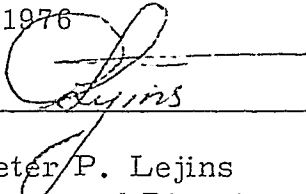
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APPROVAL SHEET

Title of Dissertation: Pre-training School Variables, In-training
School Variables and the Adjustment of
Training School Students: A Multivariate
Analysis

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Doctor of Philosophy, 1976

Dissertation and Abstract Approved: _____


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PREFACE

The material in this project was prepared under Grant No. 74-NI-99-1006 from the Law Enforcement Assistance Administration, U.S. Department of Justice. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the U.S. Department of Justice.

ABSTRACT

Title of Dissertation: Pre-training School Variables, In-training School Variables and the Adjustment of Training School Students:- A Multivariate Analysis

Ronald Keith Tait, Doctor of Philosophy, 1976

Dissertation directed by: Dr. Peter P. Lejins, Professor and Director, Institute of Criminal Justice and Criminology

A multivariate path analysis is used to test theorems on the adjustment of boys in a training school, i. e. their use of the group counseling program and their cottage behavior. In the past there have been studies of the influence of in-training variables; for example, the cottage social system, upon the adjustment of training school youth. However, there has been very little research upon the way in which pre-training school variables affect the adjustment of boys in a training school. The theoretical question of this study is whether in-training school variables or pre-training school variables are more important in explaining adjustment in a training school. The importance of this question is to extend upon previous research by examining the effects upon adjustment of both in and pre-training school variables.

A sample of 150 training school boys is studied, with data collected via questionnaires of the boys, staff questionnaires and

the school records. Path analysis of the direct effects of the independent variables upon use of the group counseling program and upon cottage behavior indicated the following findings:

1. The extent to which the boys involved themselves in the group counseling program was influenced mainly by the in-training school variables of length of stay and the attitudes of their cliques toward the staff and programs of the school. The longer the boys' length of stay and the more pro-social their cliques' attitudes, the greater was their involvement in the group counseling program.

2. The way in which boys behave in the cottage is influenced partly by their characteristics upon arrival at the school; for example, their extent of delinquency involvement, race and their expectations about how they should behave while at the school.

The main conclusion from the path analysis of the data is that the way in which boys adjust in a training school, in terms of their compliance to staff expectations, is a function of both their characteristics upon arrival at the school and various influences upon them while at the school. These findings are consistent with the results of recent studies on the adjustment of adult prisoners that demonstrate that this adjustment is influenced by both pre-prison and in-prison factors such as, respectively, extent of criminal involvement and the prison inmate social system. However, it was concluded that the inmate social system of the training school is not in as total

opposition to the administration as is the innate social system of adult prison.

Finally, two theoretical models are proposed, drawn mainly from variables in the present study. One model to explain use of group counseling programs is set forth and one model is proposed for explaining cottage behavior. It is hoped that these models will be useful in guiding future research on the variables related to the adjustment of training school youth.

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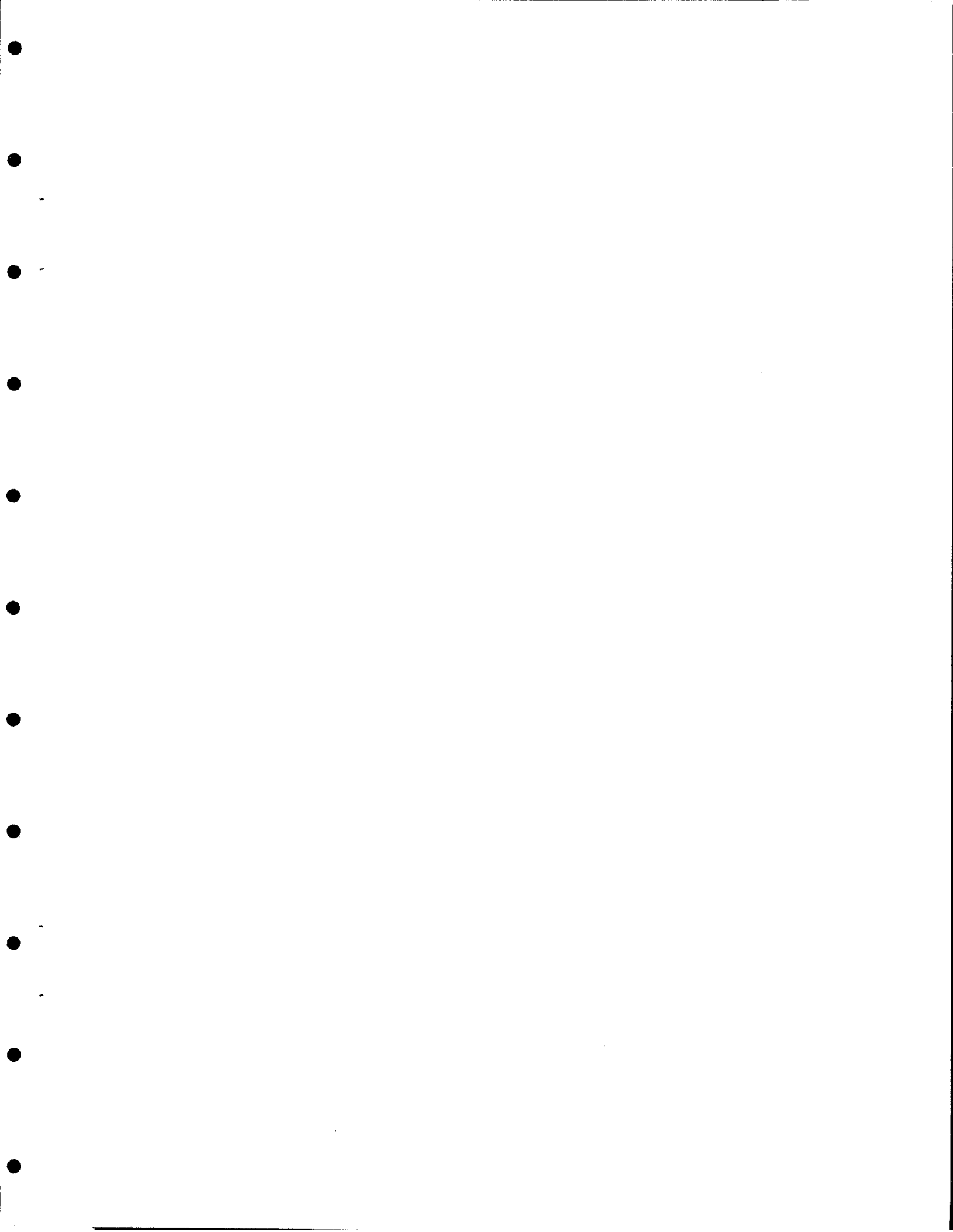
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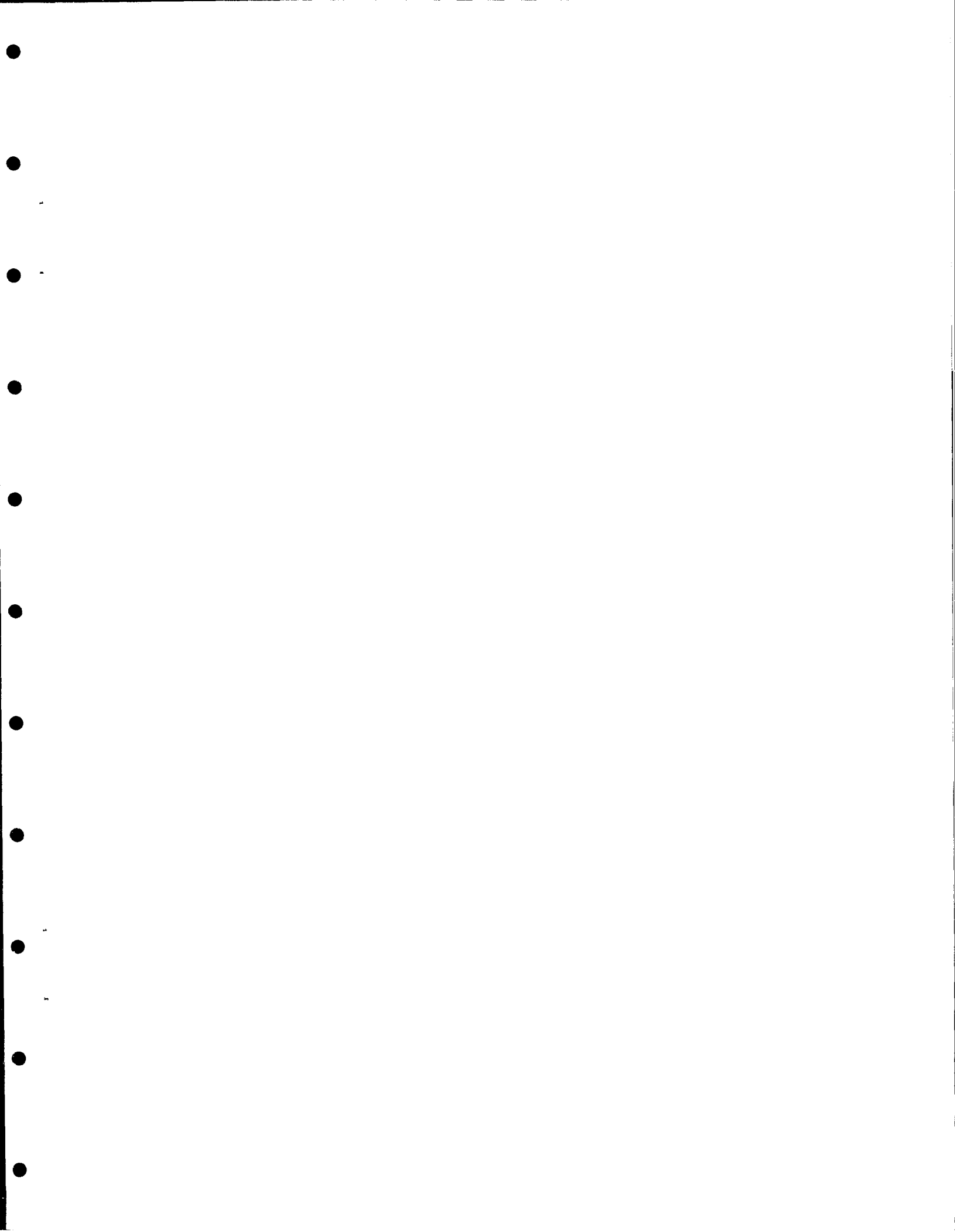
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PRE-TRAINING SCHOOL VARIABLES, IN-TRAINING SCHOOL
VARIABLES AND THE ADJUSTMENT OF TRAINING
SCHOOL BOYS: A MULTIVARIATE ANALYSIS

by
Ronald Keith Tait

Dissertation submitted to the Faculty of the Graduate School
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TABLE OF CONTENTS

Chapter	Page
Acknowledgements	ii
I. STATEMENT OF PROBLEM	1
A. The Problem	1
B. The Significance of the Study	6
II. RELATIONSHIP OF PROBLEM TO THEORETICAL FRAMEWORK	9
A. Review of Literature on Prisons	9
1. The Concept of Prisonization	10
2. Deprivation and Importation Models in Prisons	12
B. Review of Literature on Training Schools	15
1. Training School Cottages	17
2. Pre-training School Variables	20
3. Implications of Correctional Research for Present Study	21
C. Review of Sociological Theories	23
D. Theoretical Orientation	31
1. Training School Adjustment	32
2. Theorems on Adjustment in Training Schools	40
3. The Theoretical Question of the Study.	41
4. Conceptual Definitions of the Variables.	42
III. METHODOLOGY	46
A. Description of Sample	46
B. Measurement of Variables	48
1. Student Questionnaires	49
2. Questionnaires of the School Staff	63
3. Examination of the Boys' Records	65

Chapter	Page
C. Summary of Measurement of Variables	66
1. Dependent Variables	66
2. Independent Variables	66
D. Plan of Analysis	67
1. Use of Path Analysis	68
2. Assumptions of Path Analysis	71
IV. DESCRIPTION OF TRAINING SCHOOL	76
A. The Training School	76
1. Relationship of Training School to Broader Community	77
2. Goals of Maryland Training School	77
3. Programs of Maryland Training School	79
4. Summary of Boys' Evaluations of the Programs	80
B. The Social Systems of the Cottages	84
1. Cottage Norms	89
2. Cottage Stratification System	90
3. Group Membership	95
V. ANALYSIS AND INTERPRETATION OF RESEARCH FINDINGS	100
A. Use of Counseling Programs - Direct Effects	101
1. In-training School Variables and Pre-training School Variables.	102
B. Cottage Behavior - Direct Effects	104
1. In-training School Variables	105
2. Pre-training School Variables	106
C. Interpretation of Data	109
1. Tentative Conclusions on Theorems -- Use of Programs	110

Chapter	Page
2. Tentative Conclusions on Theorems -- Cottage Behavior	111
3. Tentative Conclusions on Theoretical Model	113
D. Use of Counseling Program Model	117
E. Cottage Behavior Model	123
F. Proposed Models -- For Future Research on Training School Adjustment	132
<u>VI. SUMMARY AND IMPLICATIONS</u>	<u>141</u>
A. Summary of Study	141
B. Implications of the Findings	143
C. Major Methodological and Theoretical Problems of the Study	145
D. Suggestions for Future Research	146
APPENDIX A. PRELIMINARY QUESTIONNAIRE: FOR STAFF OF THE TRAINING SCHOOL.	148
APPENDIX B. OPINION SURVEY.	150
APPENDIX C. QUESTIONNAIRE: GROUP DISCUSSION LEADERS	158
APPENDIX D. QUESTIONNAIRE: COTTAGE SUPERVISORS	160
APPENDIX E. PRELIMINARY QUESTIONNAIRE.	162
APPENDIX F. GUIDELINES FOR INTERVIEWERS	169
APPENDIX G. GUIDELINES FOR LOOKING UP RECORDS .	171
APPENDIX H. GUIDES TO SUMMARIZE DESCRIPTIVE DATA	172
APPENDIX I. PREDICTED CORRELATIONS AND PATH ESTIMATION EQUATIONS.	174

LIST OF REFERENCES

Page

BOOKS

181

ARTICLES

184

REPORTS AND PAMPHLETS.

192

LIST OF TABLES

		Page
Table I	Rotated Factor Matrix on Pre-training School Expectations	54
Table II	Rotated Factor Matrix on Cottage Norms	57
Table III	Rotated Factor Matrix on In-training School Attitudes	58
Table IV	Discriminate Validity for Variables Used in the Path Analysis	62
Table V	Reliability Coefficients and Eigenvalues for Variables Used in the Path Analysis	63
Table VI	Boys' Evaluation of the School Program	81
Table VII	Boys' Evaluation of the Point System Program	82
Table VIII	Boys' Evaluation of the Discussion Group Program	83
Table IX	Summary of Boys' Evaluation Scores on Three Programs	83
Table X	Cottage Norms	89
Table XI	Percentage of Boys Indicating a Top Group of Leaders and the Criteria for Leadership	91
Table XII	Criteria for Leadership and Cottage Norm Scores	94
Table XIII	Predicted and Observed Values for Path Model on Use of Program	119
Table XIV	Predicted and Observed Values for Path Model on Cottage Behavior	126

LIST OF FIGURES

	Page
Figure 1 Criteria for Placement of Students in the Cottages	87
Figure 2 Variable Treatment Emphasis in the Units in the Treatment Program	88
Figure 3 Path Diagram for Use of Counseling Program .	102
Figure 4 Path Diagram for Cottage Behavior	105
Figure 5 Path Diagram for Aggressiveness	108
Figure 6 Path Diagram Showing Influence of Pre-training and In-training School Variables on Use of Program	119
Figure 7 Path Diagram for Cottage Behavior	126
Figure 8 Pre-training School Variables, In-training School Variables, Use of Programs and Post-training School Behavior	138
Figure 9 Pre-training School Variables, In-training School Variables, Cottage Behavior and Post-training School Behavior	139

CHAPTER 1

STATEMENT OF THE PROBLEM

The Problem. Existing correctional practices, for juvenile and adult offenders, are in part a reflection of correctional objectives that have been emphasized at different time periods during the past several centuries. As stated by Empey (1972: 360), "revenge was the primary response to lawbreaking prior to the eighteenth century." The emphasis on revenge was gradually replaced during the eighteenth and nineteenth centuries by an emphasis on restraint, with the use of imprisonment as the main technique to correct offenders. As it became apparent that imprisonment was not successful with either adult or young offenders, there emerged in the late nineteenth and early twentieth centuries an emphasis upon reformation as a correctional objective. Focus was placed upon the mental and emotional make-up of offenders and efforts were made to alter these factors in an attempt to rehabilitate offenders. However, the emphasis on reformation has continued to coexist with the older tradition of punishment, or revenge. These two traditions, punishment and reformation, are inherently contradictory and therefore

create problems in rehabilitating offenders because "conditions of imprisonment, as a means of punishment, almost inevitably seem to produce a climate of resistance to change" (Empey, 1972:361).

As part of the emerging emphasis on reformation in corrections, during the 1800's many public and private juvenile reformatories began to stress the treatment of young offenders as opposed to just the punishment of these youth (Sutherland and Cressey, 1970: 488-490). The rationale underlying the treatment of juvenile offenders in reformatories or training schools was "that they can be separated from the complex forces in the community that led to their delinquency in the first place" (Empey, 1972: 369). Then, use could be made of "treatment" such as educational programs, individual counseling and group counseling to help change, or rehabilitate these youth. The use of treatment programs in training schools, along with an emphasis upon custody or control has continued into the 1900's (Street, Vinter and Perrow, 1966 and Gibbons, 1972). Yet, the results of more than 100 years of attempts at rehabilitation in training schools are disappointing: Vold (1958: 295), for example, notes that about 80% of the youth released from training schools return to delinquent behavior over a period of five years.

Other authors have questioned the effectiveness of treatment programs in prisons and training schools. Bailey (1966), in an

evaluation of 100 studies of correctional outcome, concludes that the results of nearly one-half of these studies suggest a lack of success of treatment programs. The studies that he reviewed included over fifty conducted in prisons and training schools. He notes that this lack of success in treatment programs is consistent with previous research results on their ineffectiveness. The authors of another review of studies note that more of the treatment projects had failed than had succeeded in terms of post-release parole performance (Shireman, Mann, Larsen and Young, 1972: 54). Empey (1972) summarizes the problems in programs for convicted juvenile offenders and suggests that the effectiveness of probation is well supported by research studies, but that incarceration of youthful offenders is of questionable effectiveness in terms of rehabilitation. For example, he argues that incarceration entails restrictions on liberty and feelings of isolation that tend to generate negative attitudes and greater delinquency. Gibbons (1972: 261) concludes that, based on parole violation rates, training schools:

"do not usually succeed in restraining wards from further law-breaking. Half to over three-fourths of first admissions to juvenile institutions apparently become reinvolved in delinquent conduct."

A question arises as to why the training school treatment programs are not more successful in rehabilitation.

There are a number of factors that would negate the effectiveness of these programs. For example, the phenomenon of delinquent

behavior and its causes is extremely complex; as reflected in the various, partially supported theoretical explanations of the causes of delinquency. Therefore, training school staff are handicapped by not knowing what rehabilitation approach to use to correct the causes and reduce delinquent behavior. A second factor in the ineffectiveness of training school programs is very likely that treatment efforts have not been stressed as much as the efforts toward the control of training school wards. "The overriding concern in juvenile institutions has revolved around prevention of escapes and large-scale disturbances" (Gibbons, 1972: 231). Prevention of escapes is considered critical in order to prevent criticism from the surrounding community. In contrast to the emphasis upon control, training schools have usually run a minimal type of treatment program with relatively infrequent individual therapy from a social caseworker.

In addition to the above two factors, there usually exists an informal inmate social system among training school inmates that influences the effectiveness of the training school programs (Kendall, 1964: 178-193). That is, some of the norms and informal groups that develop among the students in a training school are in opposition to the staff and discourage both the use of rehabilitation programs and any changes in behavior (Polsky, 1962 and Polsky and Claster, 1968). This inmate system may be partially a continuation of the

delinquent subcultures that were conducive to the development of the delinquent behavior that brought the youth to the training school. A lengthy list of researchers have studied the development and impact of delinquent subcultures to explain the high rates of delinquent behavior in inner city, lower socioeconomic status areas (Shaw and McKay, 1942; Merton, 1938; Cloward, 1949; and Cohen, 1955).

Also, there are studies of adult prisons that empirically support the existence of an inmate code, or set of norms, that often discourages rehabilitation (McKorkle and Korn, 1954; Grosser, 1968: 298-320; and Sutherland and Cressey, 1970: 531-550). Socialization within this inmate culture encourages attitudes in opposition to staff and programs (Clemmer, 1940 and Thomas and Foster, 1972).

As noted by Thompson (1969: 91-109), in the training school a great deal of interaction among the students takes place in the cottage, or living unit group. Informal cliques of boys are formed which often differ somewhat in their attitudes toward the staff and programs of the school. That is, the attitudes of some of these cliques are favorable toward the staff and programs, while the attitudes of other cliques are in opposition to the staff and programs (Polsky and Claster, 1968). These informal groups can influence boys' attitudes toward the administration and toward treatment programs (Grosser, 1968: 300-302).

In addition to the above in-training school influences, another

set of factors that may be related to the behavior of boys in a school and their use of treatment programs is the set of characteristics of the boys prior to their entering the school. This line of reasoning is analogous to that used in some recent studies of adult prisons (Thomas and Foster, 1972; Thomas and Foster, 1973 and Jacobs, 1974). The authors of these studies suggest that pre-prison variables such as extent of criminal involvement, are related to the adjustment of prisoners while in prison. It seems quite plausible that certain pre-training school variables; for example, extent of delinquency involvement, and pre-training school attitudes toward the school are related to the adjustment of boys while in training schools.

In sum, the problem of the present study was to focus upon in-training school factors and pre-training school factors that may influence the adjustment of boys in training schools.

The Significance of the Study

The present study is a multivariate analysis of boys' adjustment in training school. Previous research on adult prisons suggests that both pre-prison and in-prison variables are related to the adjustment of prison inmates. However, on the training school level, there have been few studies on how in-training school variables influence the boys' adjustment in the school. For example, the author was able to locate only two studies of the cottage social

system and its influence upon the behavior of boys in the school (Polsky, 1962 and Polsky and Claster, 1968). Also, there has not been much research upon how pre-training school characteristics of training school youth are related to their behavior while in the school. Therefore, the theoretical significance of the study is to develop a theoretical model incorporating both pre and in-training school variables and analyze their relative importance in explaining the adjustment of boys in a training school. The theoretical objective is to extend the theoretical reasoning previously applied to research on adult prisoners to an explanation of the adjustment of training school students.

Methodologically, the cottage social system is examined in a manner not previously used very extensively; with a survey design and questionnaires. Previously, use has been made of a case study design and observation to describe cottage social systems (Polsky, 1962 and Polsky and Claster, 1968). Therefore, the present study includes an attempt to develop a questionnaire applicable to the collection of data on the training school cottage social system.

Finally, it is hoped that the results of the study will have some practical implications for the staff of the school. An understanding of what factors influence whether boys make use of the group counseling programs and whether they behave in pro-social ways

in the cottages should help the staff more effectively implement their rehabilitation programs. For example, if pre-training school attitudes toward the school are related to use of programs, an orientation session for the boys, upon their arrival, might be used to encourage positive attitudes toward the counseling programs. If the attitudes of the boys' cliques, within the cottages, are related to cottage behavior, the cottage counselors might strive to develop pro-social behavior via the use of peer group pressure in the cliques.

CHAPTER II

RELATIONSHIP OF PROBLEM TO THEORETICAL FRAMEWORK

The effectiveness of rehabilitation programs in training schools has been questioned by several authors (Vold, 1958; Bailey, 1966; Shireman, Mann, Larsen and Young, 1972; Empey, 1972 and Gibbons, 1972). The present study is the analysis of those variables that have been suggested to be related to the adjustment of boys in a training school as measured by their utilization of the group counseling program and their behavior in the cottages. From a review of the literature on corrections, both prisons and training schools, and the use of several theoretical approaches; this chapter sets forth a framework within which to analyze this topic.

Review of Literature on Prisons

Many studies have focused upon the development of an inmate social system as a set of norms, values and roles. Importantly, the prison social system includes a set of values around which the thoughts and actions of inmates are oriented and a collection of norms which guide their behavior (Garrity, 1970). The inmate

social system is dominated by norms and values that are largely anti-administration. As stated by Garrity (1970: 482):

"time, sex, food, health, leisure, etc. are handled by a set of normative restrictions and expectations which encourage an inmate to 'do his own time', recognize the virtues of an alcoholic beverage called 'pruno', etc. The dominant normative system values criminal behavior, is consistent with the criminal subculture and generally disapproves of friendly and cooperative behavior with the administration."

It should be noted that this description is more applicable to maximum security prisons than to minimum security or open institutions. A common theme in the criminological literature is that the inmate social system, in part, tends to discourage rehabilitation (Grosser, 1968 and McKorkle and Korn, 1954).

However, there is variation within this inmate social system in its types of norms and roles. That is, there exists a form of 'Legitimate' subculture with norms stressing an orientation of conformity to staff expectations (Sutherland and Cressey, 1970) and the 'Square John' role which includes the value of conformity to administration rules. Garabedian (1970) supports this latter point by concluding that those prisoners classified as 'Square Johns', one of four types in his study, participated more in formal programs, had less rule violations and exhibited greater conformity to staff norms. The other three role types, in this study, were the "right guy" role, the "politician" role and the "outlaw" role.

The Concept of Prisonization. Donald Clemmer's (1940) study

of a prison community described the process of "prisonization" by which inmates are socialized into the inmate social system. All prisoners are exposed to some universal aspects of prison culture such as learning the prison slang. Yet, the extent to which a prisoner is assimilated into the inmate culture depends upon several particular factors such as his pre-penitentiary relationships and his primary groups within the prison. Slightly more than one-half of the prisoners belong to primary or semi-primary groups of about 3 to 4 members (Clemmer, 1940: 113-120). Clemmer notes that those prisoners who are integrated into the prison culture are less likely to be reformed or rehabilitated.

Wheeler (1961) modified Clemmer's basic thesis by demonstrating that conformity to staff expectations decreases with increased time in prison only up to a certain point. He found that: "at the end of their stay, as they approached release, the process of socialization seemed to reverse itself and the inmates returned to the conventional values: they seemed to shed the prison culture as they were getting ready to rejoin the normal society" (Lejins, 1964: 159).

Welford (1967) also modified Clemmer's main conclusion by showing that the degree of inmate prisonization is affected by the phase of the prisoner's stay and also by the social type of the prisoner. The 'right guy', anti-social type of prisoner was more likely to adopt the inmate code than was the 'Square John', pro-social type of inmate.

A key point in the Clemmer, Wheeler and Welford studies is that prisonization into an inmate culture may encourage a negative orientation to staff and rehabilitation programs, but this process of prisonization is not a steadily increasing one (Wheeler) nor does it affect all prisoners equally (Clemmer and Welford).

Deprivation and Importation Models in Prison. These are two theoretical models that have been used to explain the development of an inmate social system. The deprivation model is "a functional explanation, which views the inmate culture as a collective adaptation to the prison environment, more specifically the deprivations or 'pains' and 'degradation' of imprisonment," (Akers, Hayner and Gruninger, 1974: 410). Examples of some of the deprivations in prison are the loss of liberty (Thomas and Foster, 1972), status degradation (Schwartz, 1970) and rejection by society (McKorkle and Korn, 1954). Prisonization in this anti-conventional social system may decrease inmates' acceptance of administration goals and programs. The emphasis of the deprivation model is upon explaining the inmate social system in terms of the factors within the prison.

The importation model stresses the idea that much of the anti-social content of the inmate culture and the assimilation of prisoners into this culture is a function of factors external to the prison.

Both pre-prison factors such as participation in criminal activity and extra-prison factors such as contact with persons in the larger society would influence the inmates' degree of assimilation into the inmate culture. For example, inmates who had become involved in crime at an early age, as measured by age of first arrest and first conviction, were found to be more likely to make anti-social role adaptations in prison, as measured by a set of questionnaire items. Also, inmates having less contact with persons or groups in the larger society, as measured by the number of letters they received, were more likely to make anti-social role adaptations (Thomas and Foster, 1973: 226-234).

In studies using the importation and deprivation models, the results are mixed. Akers, Hayner and Gruninger (1974) found that use of drugs and homosexuality in prison were more a function of the type of prison, custody or treatment oriented, than of the social characteristics of the prisoners when they entered prison. The authors concluded that their results were supportive of the deprivation model over the importation model. Jacobs' (1974) study of gangs in prison demonstrated that the criminal dispositions and behavior patterns of prisoners before they enter prison have explanatory power for in-prison inmate behavior. That is, the gangs to which prisoners belonged prior to prison carried over into prison and had a great impact upon the informal organization and

behavior of the inmates while in prison. Therefore, Jacobs concluded that the ties to outside society must be considered in the explanation of the inmate social system, which is the reasoning suggested by the importation model.

Finally, the results of two studies (Thomas and Foster, 1972 and Thomas and Foster, 1973) are supportive of a combination of the two models. In the first study, greater normative assimilation into the inmate contra-culture was related to attitudes of opposition to the prison programs and to the development of greater criminal identity, as suggested by the deprivation model. However, more positive, post-prison expectations of inmates tended to decrease both normative assimilation into the inmate contra-culture and criminal identity. The authors conclude that the deprivation and importation models are complementary and that use should be made of both in-prison and outside-prison variables to explain the behavior of prison inmates. These same authors, in a second study in 1973, suggested that the importation model is not an alternative to the deprivation model, but extends upon it. Pre-prison variables affect the quality of the normative system that develops in the prison and extra-prison variables influence the patterns of adjustment of the inmates. Several indicators for each of these two types of variables were used and related to type of social role adaptation in the prison. The results of the study suggested that pre and extra-

prison variables were related to social role adaptation.

The overall point on these two types of models is that influences both within the prison and outside the prison should be considered in explaining both the behavior of inmates in prison and their social system.

Review of Literature on Training Schools.

Some people have found evidence which would suggest the existence of an informal inmate social system in training schools. Zald (1960) notes that training school students and staff form a community, interact a great deal and that an informal organization among the students develops that may vary from being rather hostile to the staff to being cooperative and personally involved in the programs. This variation in the type of informal organization among students depends greatly upon the use of sanctions by the staff and the relationships of the staff to the students. Yet, the anti-social and anti-organization attitudes of the students are less crystalized than those attitudes in adult prisons and therefore the juvenile institution treatment programs should have a greater impact than the programs in adult prisons. Further, according to Zald (1960) if juvenile offenders are more amenable to change than adult offenders and less committed to anti-social values; then values esteemed by the informal inmate organization may be import-

ant' to increasing or decreasing delinquent behavior patterns. The incoming delinquent has the other training school students as major socializing agents with respect to organization practices and perspectives.

Grosser (1968) notes that there are informal inmate groups in training schools and estimates that from 30% to 50% of the inmate populations in training schools are in informal groups that discourage a change in values and oppose rehabilitation programs. Gibbons (1970) notes that there is sometimes an inmate system in training schools that opposes the administration and treatment programs and some inmates, particularly those having been involved in gang delinquency, disparage the need for therapy and stress the importance of just doing time.

Street, Vinter and Perrow (1966) conducted a major study of the goals of training schools and how these influence the organization of the schools and the perspectives of inmates. In general, their results suggested that in training schools with more emphasis upon treatment than custody, inmates had more positive and cooperative perspectives toward the staff and the institutions. Also, this relationship between type of institutional emphasis and inmate perspectives held, even when various background characteristics of the boys were held constant.

With respect to the inmate social system in training schools,

these authors questioned the solidarity opposition of the inmates toward the staff and its programs. That is, they did not accept the concept in much of the research on adult prisons that the informal inmate social system of training school students is generally opposed to rehabilitation. They note that the younger ages, lesser criminal backgrounds and the lesser deprivations in training schools, as compared to prisons, may account for this lesser opposition to rehabilitation. However, they do argue that an informal group structure does emerge from the primary relations among the inmates. This structure is important in defining the informal norms of inmate behavior and the approved sets of values and beliefs.

In essence, there is, to some extent, an informal inmate social system of norms and groups in training schools. This system is not in as total opposition to rehabilitation and the staff as it is in prisons. However, some boys are in groups whose norms discourage cooperation with the administration and deemphasize rehabilitation (Grosser, 1968 and Gibbons, 1970). Finally, the values and norms of these informal groups are important guides to behavior (Zald, 1960).

Training School Cottages. Although not extensively studied, the cottage social system has been stressed by some authors as a critical factor within the training school and an important influence upon the behavior of boys at the school (Thompson, 1965 and Polsky, 1962). Thompson argues that "the quality of the cottage life program

determines to a considerable degree the success or failure of the total institutional program" (page 91). This author also suggests that the cottage climate and the skills of cottage personnel can greatly influence the young people to improve their values, attitudes and behavior. The importance of the cottage life in the boys' behavior is that it is usually their most important tie to the institution, as a great deal of the boys' interaction takes place in the cottage or with their cottage group.

There are two major works that have focused specifically upon training school cottages. The first, by Polsky (1962) was a case, observation study of a cottage in which he describes its social system and its impact upon the boys' behavior. Among various values in this cottage group were masculinity, aggressiveness, distrust and being 'wise'. The values of masculinity-aggressiveness and being 'wise' compare, respectively, to the lower class focal concerns of toughness and smartness noted by Miller (1958: 5-8). "Every boy found it necessary to adopt the values and patterns of the deviant subculture and to function in the role imposed by the group" (Polsky, 1962: 7-8). There also existed several peer action processes and sanctions by which members learned to conform to the prevailing group norms. Examples of some sanctions were threat gestures and aggression and the processes of 'ranking', or intense teasing and scapegoating, or picking on a particular boy. Polsky noted that

a boy was forced to adopt the norms of the subculture, regardless of his intrapsychic characteristics.

There also existed a very definite stratification system ranging from a top leadership clique down through the 'con artists', the 'quiet types', the 'pushboys' and, at the bottom, the 'scapegoats'. The top leadership clique set the tone of the cottage; for example, cooperative or uncooperative with the staff and enforced the standards via sanctions of violence and manipulation. Importantly, these standards pervaded the entire cottage. Also, cliques of boys within the cottage formed, maintained close contact and greatly influenced and regulated the behavior of the individual members.

A very important point is that the values, norms and groups in the cottage greatly influenced the boys' behavior in the cottage and their use of the school treatment programs. For example, Polsky observed that the cottage peer groups represented powerful reference groups that stood between the individual boy and the staff and could decrease the amount of personality change. Some resistance to psychotherapy emerged from the cottage culture and much of the boys' lack of motivation in the institution's school program stemmed from the peer group culture.

The social systems of different cottages can differ, with some more favorable to staff values than others (Polsky, 1962). This point is supported by a case study by Polsky and Claster (1968) of

three different cottage units in a training school. One cottage tended toward an absence of staff oriented roles, one cottage tended toward positive relations to staff and one cottage fell between these two cottages in relationships to staff. The differences between the cottages were related to differing emphases of functions by the cottage supervisors. For example, in the cottage with less staff oriented roles among the boys and a more negative, delinquent power structure, the cottage supervisors stressed the custody function.

Pre-training School Variables. In contrast to several studies using the importation model to study adult inmates; for example, analyzing pre-prison variables as they relate to inmate adjustment, the author encountered very few studies focusing upon the characteristics of boys upon their arrival at the school and how these were related to their adjustment in the school. As noted previously, Street, Vinter and Perrow did consider the background characteristics of boys in a training school. They found that the relationships between type of training school objective and several dependent variables held even when the background attributes of the boys were held constant. These authors did not analyze the relationship of pre-training school variables to the boys' use of counseling programs or their behavior in the training school. O'Conner (1970) found some support for the idea that boys of higher delinquency orientation were

less responsive to correctional personnel and to programs. This relationship was only mildly supported in that on another scale of delinquency orientation, there was not a significant difference in degree of responsiveness by type of delinquency orientation. As the study involved a sample of boys in detention halls, the results are not necessarily applicable to training schools.

Implications of Correctional Research for the Present Study.

From the review of the literature, there emerge several implications for the present study:

1. There exists a very definite prison inmate social system, extensively studied, that influences the behavior of inmates. The impact of pre and extra-prison variables upon the adjustment of inmates has been mentioned in the literature for years, for example, by Clemmer (1940). More recently, there have been several studies on the effects of these variables upon inmate behavior as compared to the effects of the inmate social system. The general thrust of the prison literature is that to more fully understand the behavior of inmates, both in-prison and pre and extra-prison variables must be considered.
2. There exists an inmate social system in training schools that influences the behavior of training school boys; however,

in general, this system is less crystalized and less in opposition to staff than that of prisons (Zald, 1960: 60-65 and Street, Vinter and Perrow, 1966: 225-230). Of major importance to the functioning of a training school is the cottage unit. The social system of this unit has been shown to exert great influence upon the boys' behavior and their use of treatment programs. Included in this cottage system are the norms, ranking system and cliques of the cottage. Also, the cottage social systems can vary, with some being more pro-social in nature than others in terms of encouraging pro-social behavior and use of treatment programs. Although the effect of length of stay upon adult inmate's attitudes has been studied, by Clemmer, Wheeler and Welford, this variable has not been stressed in studies of training school students.

3. There has been very little research upon the effect of pre-training school variables upon the adjustment of boys in a training school. This is in contrast to the recent studies of the adjustment of adult prisoners which consider pre and extra-prison variables, incorporating these into the 'importation' model.

Review of Sociological Theories

To interpret, within a sociological framework, the process by which pre and in-training school variables affect training school adjustment, use is made of several theories on social class, institutions and small groups. That is, working class, delinquent subcultures may influence the attitudes of the youth upon their arrival at the school and this influence may extend to their stay at the school. Also, within the training school, the youth would be subjected to the effects that are common to all institutions. Finally, within the training school, most particularly in the cottages, the peer groups would exert pressure upon members in terms of attitudes toward the staff, which would, in turn, be manifested in the boys' training school adjustment. Thus, the adjustment of training school youth is interpreted as partly a function of the forces generated by their working class delinquent subculture and the structural aspects of the institution and small, primary groups within the institution.

An important development of sociological theory and research on deviant behavior, including crime and delinquency, is Merton's use of Durkheim's concept of anomie. Durkheim (1951) used this concept, meaning the weakening of social norms, to explain the type of suicide resulting from rapid changes in society such as economic depressions. Merton (1938) applied Durkheim's concept

by noting that the existence of culturally approved goals, such as material success, and limited culturally accepted means for some groups create pressure in the society toward anomie. More specifically, Merton set forth a typology of five modes of adaptation based upon the acceptance and/or rejection of societal goals and means. The mode of innovation, including crime and delinquency, represents the acceptance of societal goals but the rejection of the culturally approved means. This mode of adaptation is higher among groups for whom the availability of legitimate means are limited, such as the lower class and minority groups. The rates of crime and delinquency have been shown to be higher among the lower social class (Gibbons, 1975: 105-111). Hewitt (1970) set forth the reasoning that persons in the lower ranks of the stratification system have lower prestige and therefore lower self-esteem. Lower self-esteem is related to both greater anxiety and lower norm commitment. Therefore, self-esteem is the link between stratification and deviant behavior.

Cloward (1959) extended Merton's typology on deviant behavior by stressing that differential access to legitimate means and to illegitimate means is important in generating pressures toward crime and delinquency. Cloward and Ohlin followed the works of Durkheim and Merton to the conclusion that "at least three different subcultures have been invented as a response to a clash between

values which promote unlimited aspirations and a social structure which restricts accomplishments of the aspirations" (Sutherland and Cressey, 1970: 103). These subcultures are the "criminal subculture", the "conflict subculture" and the "retreatist subculture". Cohen (1955) suggests that a delinquent subculture emerges among working class boys as an attempt to develop criteria for status, to offset the lack of success and status in school. Kendall (1964) describes a subculture of gangs in a New York training school which seems an extension of the delinquent subculture values of their working class backgrounds. This subculture is anti-administration and in opposition to the rehabilitation programs in the training school.

Of several works on the impact of institutional living, Goffman's Asylums, 1961, is a major work which describes the process of mortification of self. Goffman suggests that there are great similarities among different types of institutions such as mental hospitals, prisons, nursing homes and concentration camps. The key point is that several characteristics of the institutions, which are inevitable aspects of dealing with large numbers of people, combine to strip individuals of their previous conceptions of self. Some of these institutional characteristics include being processed as part of a mass upon entrance to the institution, obedience tests by the staff, use of standard issue possessions and loss of one's

personal belongings, or identity kit. There also are a system of privileges and a definite staff-inmate status distinction, both of which are seen as necessary to maintain order among the inmates.

Tittle (1965), in a case study of mental patients in a hospital, found that the greater the extent to which the staff defined the patients as prisoners, the greater the extent to which the patients defined themselves as prisoners and then the greater the extent to which they accepted a pre-existing prisoner code. Also, greater acceptance of this prisoner code was related to less successful participation in the therapeutic programs, among non-volunteer or term patients. Moos and Houts (1970), found a relationship between the social atmosphere of different wards, consisting of several dimensions as perceived by the inmates, and the degree of patient satisfaction and initiative. Perucci (1967) found that patients who felt they had met the four criteria of the "release" ideology, such as being allowed ground privileges, but were not released became quite upset. This individual patient's disturbance could spread and generate collective disturbance among the patients on a ward.

Empey and Rabow (1961) noted that there exists a staff-inmate split in training schools, a point made by Goffman with respect to all types of institutions. Empey reasoned that this staff versus inmate conflict was an important factor in defeating the treatment efforts by the staff. Attempts were made, in small inmate discussion

groups, to overcome this conflict. The small discussion groups were also used to generate peer pressure toward conforming behavior among the training school boys.

Several social psychological theories and studies seek to explain the impact of groups upon the attitudes and behavior of individuals. Field theory suggests that human behavior is a function of characteristics of the person, such as heredity and personality, and characteristics of the social situation, including the presence or absence of others and the attitudes of others in the community (Wrightman, 1972: 16-17). That is, all psychological events are a function of the life space, "which consists of the person and the environment viewed as one constellation of interdependent factors" (Wrightman, 1972: 16). Also, as noted by Lewin, these psychological events should be explained in terms of present life space factors and not as a result of earlier experiences of the person, as is stressed in psychoanalytic theory.

Several researchers have done studies using field theory as a framework with which to interpret their findings. Coch and French (1948) studied why people resist change and found that participation in the planning of changes of jobs in a factory decreased resistance to the change. More specifically, the experimental groups, who helped plan the job changes, reached their previous levels of job performance and exhibited less aggression than a control group

which had not participated in the planning. The experimental and control groups were matched on such variables as efficiency ratings and degree of change that would be involved in the job transfer.

Lewin (1958) did a field experiment in which the experimental subjects discussed how they might encourage housewives like themselves to use certain kinds of meats. It was found that 32% of the experimental subjects used these meats as opposed to only 3% of the control subjects. Cartwright (1968) suggests that the group is where beliefs, attitudes and values are grounded so that attempts to change people must involve group forces. He also notes that the more attractive the group is, the more influence it can exert upon its members.

Closely related to field theory is the approach by gestalt theorists which suggests that behavior takes place in a field of interdependent factors, including cognitions and attitudes of people (Wrightman, 1972: 13-18). Behavior is purposeful and goal oriented and the brain is an organizer and interpreter. Persons do not behave in just a stimulus response manner, but, in part, according to their perceptions of the social situation. Two consistency theories that reflect a gestalt orientation are Heider's structural balance theory and Festinger's cognitive dissonance theory. In the former, the key idea is that there is a basic psychological process which makes people want to have perceptions well balanced or

organized. For example, if a person's perceptions are that he favorably evaluates another person, but that person negatively evaluates their relationship, an inconsistency exists making the person feel badly and want change. The main propositions of cognitive dissonance theory are that dissonance between a person's cognitions, or ideas, is a noxious state and the severity of the dissonance depends upon the number and importance of the cognitions that are involved. Persons in this state seek to add or change cognitions in order to lessen the dissonant state and to reduce their feelings of tension.

Symbolic interactionism represents a social psychological perspective that stresses three main elements (Blumer, 1969: 1-6):

1. People act toward things on the basis of the meanings the things have for them. This element implies that behavior is not just a product of external forces such as norms.
2. Meaning of a thing is a social product in that it is derived from the ways in which persons act toward the person, with regard to the thing; for example, a norm.
3. The use of meanings by the actor occurs through a process of interpretation. For example, a person may interpret a norm as not important for him to follow.

Mead (1934) suggested that the social self, consisting of the

"Me" and the "I", develops via a process of symbolic interaction with significant others and the generalized other. As a person is socialized, he internalizes the expectations for behavior during interaction with significant others; for example, his mother and with the generalized other, such as play groups of which he is a member. The internalized expectations of others become the conforming part of the social self, i.e. the "me", while the innovative, creative part of the self is the "I". Cooley's looking glass self represents another symbolic interactionism approach to the development of one's self-concept (1909).

The labelling approach to deviant behavior, as set forth by Schur (1971), Becker (1963) and Lemert (1969), is a social psychological approach to the explanation of deviant behavior. The key point is that deviant behavior is greatly a function of societal reactions and definitions of deviant behavior. A person who is labelled a deviant; for example, a drug addict or a delinquent, may experience negative reactions from society and thus define himself as a deviant, which encourages more deviant behavior.

The implications of the review of sociological theories for the present study are as follows:

1. Social class position influences a variety of behavior, including deviant behavior. More specifically, deviant behavior is partly a result of limited opportunities for some groups in society

such as the lower social class. The limited access to legitimate opportunities may generate criminal subcultures. A working class delinquent subculture develops as a way for working class boys to handle status problems and some of the anti-social values of this subculture may be carried over into training schools.

2. The training school, one type of institution, may include some characteristics of total institutions that are detrimental to the use of treatment programs, such as a split between the staff and the inmates.

3. While in a training school, boys may be greatly influenced by the groups of which they are a member toward making their own attitudes and behavior consistent with the attitudes and behavior of their groups, as stressed in the consistency theories. Also, prior to arrival at a training school, the fact of having been labelled a delinquent may have influenced their self-concepts and their attitudes and behavior.

Theoretical Orientation

In this section, theoretical propositions are set forth by which to examine the relationships of in-training school variables and pre-training school variables to boys' adjustment in school, as comprised of the two variables:

1. use of the group counseling program
2. behavior in a training school

From the propositions, hypotheses are derived and finally, the theoretical question of the study is specified, followed by the conceptual definitions of the variables in the theorems.

Training School Adjustment. To explain the adjustment of boys in a training school, including both use of the group counseling program and cottage behavior, the following propositions are set forth:

1. Boys' use of the counseling program and their behavior in the cottage are influenced, respectively by their relationships to the counseling staff and the cottage supervisors. Boys having more positive relationships to the staff are more likely to involve themselves in the counseling program and to obey the cottage rules.
2. Boys' relationships with staff at a school are influenced by their general attitudes toward the staff, programs and rules of the school. It seems plausible that boys with a generally positive attitude toward these three objects would more readily enter into more positive relationships with the staff. Boys who felt hostile or resentful toward the programs, rules of the school and the personnel would avoid entering into relationships with the staff or would develop conflictual relationships with them. Street, Vinter and Perrow (1966) used a basic assumption in their study,

as follows:

- a. Attitudes of hostility, withdrawal and alienation will likely hinder attempts to change a youth, whatever the technology of change.
 - b. Attitudes of cooperation, openness and trust will more frequently permit change, whatever the technology of change.
3. Boys' relationships toward staff, programs and rules are also influenced by the norms and attitudes of the groups to which they belong; for example, their cottage unit and their cliques within the cottage. Cohen (1955: 49-75) suggests that human action is a series of efforts to solve problems, which result from one of two sources: one's frame of reference, or point of view and one's situation, including the expectations of others for our behavior. Really difficult problems result from inadequate solutions within the situation; that is, solutions that leave persons with various negative feelings such as tension and guilt. For example, boys with positive attitudes toward staff, programs and rules, their frame of reference, in cottages with anti-social norms or in cliques with anti-social attitudes, the situation, face a difficult problem. Similarly, boys with negative attitudes in pro-social cottages or cliques

face a problem.

Cohen suggests that effective, satisfying solutions to the problems of a discrepancy between one's frame of reference and one's situation entail a change in one's frame of reference. Persons feel pressured to adopt solutions that are congenial to their peers so that their conduct and frame of reference are consistent with the expectations of others. This conformity to the expectations of others is rewarded by the acceptance and recognition of the group. Thus, boys in a training school would likely change their frame of reference, or attitudes, to conform to the expectations of their cottage group and clique in order to obtain prestige within these groups. The prestige they would obtain would validate their attitude which would then motivate and justify their behavior; for example, in their relationships toward staff and their use of the counseling program and behavior in the cottage.

There is some support for the proposition that training school boys' attitudes are influenced by the norms and attitudes of the groups to which they belong. Two authors (Haskel and Yablonski, 1974: 348-403) concluded that pro-social boys found it difficult to reconcile the demands of the administration and those of anti-social

peers in the cottage. New boys in an anti-social cottage were pressured to conform to the norms of the group by the processes of physical and mental coercion. Also, the idea of field theory and cognitive dissonance theory suggest that there would be pressure for the boys to alter their attitudes to conform with the attitudes of their peers.

Finally, further support for the idea that the cottage cliques would influence the boys' behavior and use of programs is found in the data from the author's preliminary questionnaire of 9 staff members at the Maryland Training School. (See Appendix A. Preliminary Questionnaire; for Staff of the Training School.) All 9 staff persons responded that peer group pressure in a cottage influences how much a resident would accept the programs of the school and his behavior at the school.

4. Also, the boys' length of stay is likely another important in-training school variable influencing their relationships to staff and therefore their use of programs and their cottage behavior. However, the nature of the influence of this variable is difficult to predict. If boys become involved in anti-social cliques and cottages with anti-social norms, greater length of stay would lead to negative relationships with staff and therefore little use of programs and

rule violating behavior in the cottage. Involvement with pro-social cliques and norms might have the opposite effect. However, greater length of stay might very well lead to more positive relationships to staff, through the extended period of interaction with the staff and their efforts to relate to the boys. The more positive relationships to staff could then encourage the boys to enter more fully into the group counseling sessions, which in turn might be conducive to more obedient behavior in the cottage. Finally, it seems logical that the longer a boy stays the more he may realize that he must make use of the programs and behave well in the cottage in order to be released to the community.

5. Boys' attitudes toward staff, programs and rules, while in the school, are influenced by their characteristics upon arrival at the school. Three pre-training school characteristics of importance to in-training school attitudes and behavior would be: (1) pre-training school attitudes toward the school, staff and rules of the school, (2) delinquency involvement and (3) race. Boys with generally negative pre-training school attitudes toward the school would, by definition, be predisposed to react in an anti-social manner toward the staff, rules and programs and therefore toward

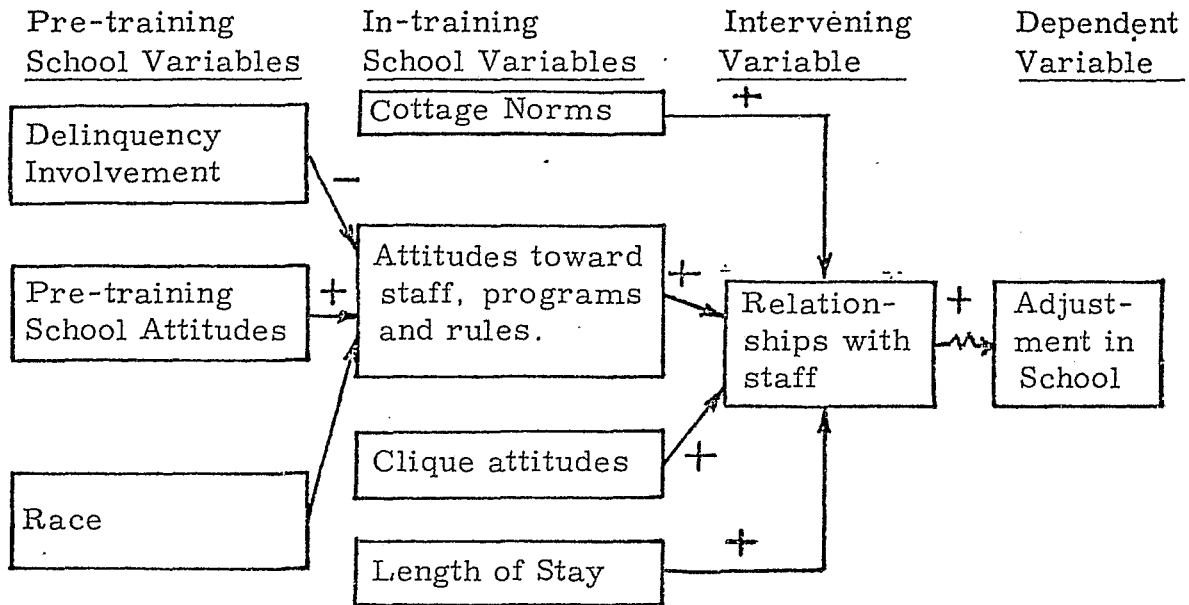
not developing positive relationships with the counselors and cottage staff. This type of phenomenon could represent a self-fulfilling prophecy. Boys' having negative attitudes upon arrival at the school would interact in a negative manner with the counseling staff and disobey the cottage supervisors, receive negative sanctions for their attitudes and behavior which would confirm for them their originally negative attitudes.

Secondly, boys having a high level of delinquency involvement prior to coming to the school may have developed generally anti-social attitudes via working class delinquent subcultures, which predispose them toward anti-social attitudes toward the staff, programs and rules. Also, Lemert (1969: 603-607) and Becker (1963: 1-30) reason that the reactions of society toward deviance create more deviance. For example, being arrested by police and processed in a juvenile court can create problems for a boy such that he is more likely to continue a deviant career (Becker) and more likely to become a secondary deviant (Lemert). Importantly, a youth in the stage of secondary deviance would have a self-concept of being deviant. For example, a delinquent youth at the stage of secondary deviance may define himself as a delinquent and take on

anti-social attitudes consistent with this self-concept. However, Dinitz and Reckless (1972) in a study of boys arrested by the police and taken to court, did not find support for this labelling perspective as applied to delinquent youth. Specifically, few of the boys felt that their friends and family had changed their opinion of them because of their experience with the police and the court.

Finally, Black youth may enter a training school with more anti-social attitudes than White youth, which may pre-dispose them toward more negative attitudes toward the staff, programs and rules. It seems possible that if these black youth experienced prejudicial treatment from the police and courts, this may have generated negative feelings toward all agencies of social control, including a training school. Piliavin and Briar (1964) observed that prejudice by police in apprehension and disposition decisions generated feelings of hostility among Black youth in a neighborhood. Harris (1975) found that from point of entry through extended imprisonment, Blacks showed higher levels of expected value on a criminal choice than did Whites. He interpreted this as a function of their lower social positions preceding imprisonment.

The five propositions just mentioned may be depicted as follows:



The previous discussion could lead to these summarized propositions:

1. More positive adjustment in school, including use of the counseling program and cottage behavior, is influenced by more positive relationships with staff.

2. More positive relationships with staff are influenced by more positive attitudes toward staff, programs and rules, by more pro-social cottage norms and clique attitudes and by greater length of stay.

3. Finally, boys' attitudes toward staff, programs and rules, while in school, are influenced by three pre-training school variables: namely, delinquency involvement, pre-training school attitudes and

race.

Hypotheses on Adjustment in Training Schools. From the above propositions, the following hypotheses may be set forth.

1. There will be a positive relationship between pro-social cottage norms and extent of pro-social training school adjustment. (That is, boys who perceive their cottage as having pro-social norms will more likely display greater compliance in their behavior at the school, as reflected in greater involvement in the group counseling program and in greater conformity to the cottage rules).
2. There will be a positive relationship between pro-social clique attitudes and extent of pro-social training school adjustment.
3. There will be a positive relationship between length of stay and extent of pro-social training school adjustment.
4. There will be a negative relationship between amount of delinquency involvement and extent of pro-social training school adjustment.
5. There will be a positive relationship between pro-social pre-training school attitudes and extent of pro-social training school adjustment.
6. There will be a relationship between race and training school adjustment, with Whites more often making a pro-social adjustment.

The Theoretical Question of the Study. The central theoretical question of the study is whether in-training school variables or pre-training school variables are more strongly related to adjustment in a training school. The importance of this question is to extend upon previous research done on the adjustment of training school boys by examining both in and pre-training school variables in one study. As suggested in recent studies of adult prisons, the behavior of prison inmates is influenced by both pre-prison and in-prison variables. Therefore, in the analysis of the adjustment of boys in training schools, it seems theoretically sound to include both pre and in-training school variables. The use of just one set of variables would exclude the way in which these variables are interrelated. More specifically, if you assume only in-school variables affect adjustment, the influence of important variables external to the training school social system will be excluded. The ultimate theoretical objective is to develop a theoretical model, from analysis of the data, that incorporates the statistically significant relationships of both pre and in-training school variables to the dependent variables. This revised model could then be used as a guide for future research in the adjustment of training school boys. Finally, it is expected that there will be some relationship from pre-training school variables to in-training school variables to the dependent variables. Therefore, the interrelationships of

these variables will be explored by the use of path analysis.

Conceptual Definitions of the Variables. The conceptual definitions of each of the variables in the model are as follows:

A. **Dependent Variable: Adjustment in School includes Utilization of Group Counseling Program and Cottage Behavior.** Conceptually, adjustment in school refers to the extent of compliance to staff expectations by the boys in their behavior at the school, as reflected in whether they involve themselves in the group counseling program and in how they behave in the cottage. A boy may actively participate in the counseling program or not participate at all or fall somewhere in between. Also, a boy may make a good adjustment in the cottage, obey the rules and be rather non-aggressive or he may behave in an opposite way to these three or his behavior may fall somewhere in between.

B. **Independent Variables**

1. **Delinquency Involvement.** This, conceptually, refers to the amount of officially recorded delinquency by a boy prior to his present commitment at the training school.
2. **Pre-training School Attitudes.** These, conceptually, refer to the general feelings of boys toward the school, staff and rules of the school, upon their arrival at the

school. More specifically, there are three interrelated variables, defined as follows:

- a. Expectation of Help - This refers to the boys' feelings regarding whether they expected to receive help in straightening out by being sent to the school.
 - b. Expectation for Behavior - This refers to the boys' feelings as to how they should behave when they entered the school; for example, in relation to the staff and rules of the school.
 - c. Expectation for Involvement - This refers to the boys' attitudes about whether they expected to actively try to help themselves at the school; for example, by trying hard on schoolwork subjects.
3. Race. This simply is the dichotomous variable of White or Black.
 4. Cottage Norms - These in general refer to the boys' perceptions of expected behavior in a cottage, ranging from pro-social to anti-social. More specifically, it includes these two variables:
 - a. General Cottage Norm - This is the perceived pattern of expected behavior in a cottage and covers a wide

range of behavior; for example, whether to obey the school rules and how to relate to staff.

- b. Specific Cottage Norm - This refers to perceived specific patterns of expected behavior; for example, whether to be tough and 'slick.'

5. Individual Attitudes. These refer to the feelings of boys toward the school, staff and rules, while they are in the training school, and include:

- a. Attitudes Toward Help - This variable includes the boys' feelings regarding whether they are receiving help by their stay at the school.
- b. Attitudes Toward Involvement - Conceptually, this refers to the boys' feelings as to whether they should actively try to help themselves straighten out while at the school.
- c. Attitudes Toward Behavior - This refers to the boys' feelings about how they should behave, while at the training school; for example, whether they should act tough and whether they should try to 'con' the staff.

6. Clique Attitudes. This represents the attitudes of the boys' group of closest friends in their cottages, the boys with whom they hang around most of the time. The

attitudes refer to those toward the school, staff and rules.

7. Length of Stay. This is simply the length of time a boy had been at the training school, at the time of interviewing, during his present stay at that institution.

Chapter III

METHODOLOGY

This chapter sets forth a description of the sample, the measurement of the variables and the plan of analysis of the data.

Description of the Sample

The sample consists of 150 training school boys between 16 and 18 years of age. These boys have been committed to Maryland Training School by the courts for a variety of offenses. The mean length of stay for the 150 boys, at the time of their being interviewed, had been 14.9 weeks.

In terms of their family background, the boys came from predominantly lower and working class backgrounds. Of the 88 boys for whom the school records indicated the occupation of the head of household, almost one-half were from families in which the head of the household was not working. The remaining boys were almost entirely from working class families in which the jobs of the heads of the households were either unskilled, semi-skilled or skilled. The records revealed that 48 of the boys are white and 100 of the boys are black. According to a training school document

(Dean, 1975), the family relationships of the boys varied, ranging from: (1) strong, but conflictual through (2) warm (at least to mother) to (3) rejecting, weak and disorganized. Also, the boys ranged from a reading comprehension grade level of 0.0, non-readers, to 6.0. About one-half of the boys were slightly above a reading comprehension grade level of 4.0. The determination of these levels, made initially when the boys arrive at the school, was done by a staff reading tester. He simply asked the boys to read a brief selection of material and then made a judgement of the boys' reading grade level. Later, a more extensive evaluation is done, with the California Wide Achievement Test, for placement of the boy at an appropriate level in the school program. In summary, the boys in the sample were predominantly lower and working class, had rather weak or conflictual family relationships and were of very limited reading ability for their ages.

The sample of 150 boys consisted of those boys who could be interviewed, from among 172 boys on the school's roll call list as of February 20, 1975. There were no students who refused to take the interview and the breakdown for the 22 boys on the roll call list who were not interviewed was as follows:

1. 11 boys were released to the community during the period of interviewing.
2. 5 boys were transferred to other custody during this period.

3. 4 boys were 'Away Without Leave.'

4. 2 boys were unavailable for interviewing because of doing maintenance work on the grounds of the school.

The boys were interviewed by a staff of nine college students, who were hired and trained by the researcher. The nine interviewers went to the training school on two successive Wednesdays; February 26, 1975 and March 5, 1975 and each interviewer administered the questionnaires to groups of four training school students at a time. The interviewing on these two days resulted in 140 completed questionnaires. One interviewer returned the following week to conduct interviews with 10 boys who were unavailable for the group interviews. An important point is that all of the 150 boys in the sample had been at the training school for at least one week before they were interviewed and therefore had some exposure to the norms and cliques of the cottages and the rules and programs of the school.

Measurement of Variables

Three techniques of data collection were used to obtain the information with which to measure the variables of the study:

1. Questionnaires administered to the students (Appendix B).
2. Examination of the boys' records.
3. Questionnaires completed by the discussion group leaders and the cottage supervisors (Appendix C and Appendix D respectively).

Most of the questionnaire items were taken from questionnaires used by researchers in previous studies of correctional institutions (Vinter, 1966; Street, Vinter and Perrow, 1966 and Knight, 1970).

There follows a description of the steps taken, for each of the above techniques of data collection, to ensure the validity and reliability of the measurement procedures.

Student Questionnaires. Data from these questionnaires was used to measure pre-training school attitudes, cottage norms, in-training school attitudes, length of stay and clique attitudes. The questionnaire was pretested on twenty boys, at a training school other than that used for the study sample, to ensure that the items were understandable. It was found that the boys did not know and/or could not understand a question asking the occupations of the heads of household in their family. Specifically, fourteen of the twenty boys did not respond clearly on this question. That is, many did not answer the question at all and a few were not specific on the type of job. Also, two questions on the number of letters and visits the boys received from their families were dropped as these questions were found to be quite offensive to the boys. That is, ten of the twenty boys did not answer these questions or gave meaningless answers. Many boys wrote responses such as "what business is it of yours?" It was concluded that these were such disturbing items to these youth that it was better to drop the questions than to risk

upsetting the boys to be interviewed for the study. It was felt that strong negative reactions of some of the boys in the study sample to these two items could lead them to refuse to answer the other questionnaire items. Finally, based on the pretest, the author concluded that the remaining questions were entirely understandable to the boys and also that they had no qualms about completing the questionnaire, nor about answering in a candid manner. This conclusion was drawn from a discussion with a few of the pretest respondents as to their understanding of the questions and their feelings about responding in a candid manner.

To further ensure understandability of the questionnaire items, the interviewers who administered the questionnaires read the questions to the boys who also had the questionnaires before them. The reading of the questionnaire items was done because of the students' low levels of reading ability and to prevent the embarrassment of a boy having to ask what certain words were. To help ensure that the interviewers all administered the questionnaires in the same way, a set of guidelines for interviewing were given to each interviewer (Appendix F). Two training sessions for the staff of nine interviewers were held to discuss the questionnaire items and the guidelines for interviewing.

An extremely critical methodological point was to obtain candid replies from the boys in the sample. There have been

studies in which the researchers used questionnaires of boys in training schools as major sources of their data (Street, Vinter and Perrow, 1966 and Knight, 1970). In each of these studies the techniques that were used to ensure candid answers were quite similar to the techniques used in the present study. As a way to stress the anonymity of students' responses and therefore decrease their fears about their replies being made known to the staff, use was made of a system in which their names were on labels, which they were instructed to tear off when they obtained their questionnaire. Further, to encourage candid replies from the boys, the interviewers were instructed to stress to the boys that they give honest answers, that there were no right or wrong answers and that the results of the study depended upon their giving honest answers.

Also, the researcher took great care in selecting the 9 interviewers for the project. In all cases, these college students were recommended by colleagues in the Department of Sociology or were known personally by the author. The main criteria used in hiring these interviewers were personal integrity and dependability. It was also felt that the rather close ages of the college student interviewers and the training school students might help to encourage a rapport between interviewers and respondents that would increase cooperation among the respondents and facilitate candid replies.

Forty-one of the items on the student questionnaires pertained

to the boys' pre-training school attitudes, cottage norms, in-training school attitudes and attitudes of cliques. The questionnaire items were coded as follows: 1, for pro-social responses; 0, for anti-social responses; 5, for "don't know" and 9, for no response. A factor analysis was made of the items on these four concepts in order to:

1. Explore the patterning of the variables.
2. Construct indices to be used as new variables in the analysis of the data.

More specifically, use was made of principal factoring with iterations and varimax orthogonal rotation. The steps in the factoring process were: (1) the preparation of a correlation matrix of the items for each of the four concepts; (2) the extraction of the initial factors and (3) the rotation to a terminal solution. The correlation matrix for each of the four concepts consisted of product moment correlation coefficients between each pair of questionnaire items, as attributes of the individuals.

The main diagonals of each correlation matrix were replaced with communality estimates, i. e. the squared multiple correlation between a given variable and the rest of the variables. An iteration procedure was used to improve the estimates of communality until the differences in two successive communalities were negligible (Nie, Bent and Hull, 219-220). Initial factors with eigenvalues of

1.00 or higher were extracted, for each of the four domains. For example, the 12 items measuring in-training school attitudes were reduced to three factors having eigenvalues of 4.16, 1.5 and 1.20. Finally, the factors were rotated using the varimax method which maximizes the variance of the squared loadings in each column, i. e. the regression coefficients of factors to questionnaire items.

The extraction and rotation process yielded the following:

1. Three factors from the pre-training school attitude items.
2. Two factors from the items on cottage norms.
3. Three factors from the items on in-training school items.
4. One factor from the clique attitude items.

Based on examination of the theoretical significance of the questionnaire items that loaded most heavily on a factor, the factors were appropriately named and became the variables used in the path analysis of the data. The factor loadings for the pre-training school factors, cottage norms and in-training school attitudes are presented in Tables I-III on the following pages.

TABLE I

Rotated Factor Matrix on Pre-training School Expectations

Questionnaire Items	Factor A (Expectation of Help, X_1)	Factor B (Expectation for Behavior, X_3)	Factor C (Expectation of Involvement, X_{13})
Item Number			
14	.607*	.178	.102
15	.629*	.029	-.077
18	.366*	.086	.318*
19	-.149	.493*	.177
20	.013	.135	.907*
21	.135	.591*	.122
22	.226	.500*	-.098
23	.351	.481*	.109

Observation of the table indicates that questionnaire items 14, 15 and 18 are heavily loaded on Factor A. These three questionnaire items were:

14. I thought this would be a place that would help me, rather than a place to punish me. Yes _____ Don't know _____ No _____

15. I thought I would be helped a great deal by being sent here.

Yes _____ Don't know _____ No _____

18. I thought that I should try to straighten out and make the best of my stay when I got here. Yes _____ Don't know _____ No _____

As these three items all centered on the boys' expectations of whether they would be helped by being sent to the school, this variable was named 'Expectation of Help', X_1 . The composite scale for this variable was built by using factor scores (Nie, Bent and Hull, 1970: 226-227). The scales for the other two pre-training school variables, X_3 and X_{13} , as well as the remaining scales to measure the two cottage norm variables and the three in-training school variables, were built in the same way.

In Table I, it should also be noted that questionnaire items 19, 21, 22, and 23 are heavily loaded on Factor B. These items were:

19. I thought I should try to 'con' the staff when I got here.

21. I thought I should try to follow the rules of the training school when I got here.

22. I thought the best way to make it here would be to act tough.

23. I thought that the best way to make it here would be to play it straight.

As these four items focused upon behavior, the variable, X_3 , was named 'Expectation for Behavior'. Finally, as items 18 and 20 are heavily loaded upon Factor C, they were more heavily weighted than the remaining items in the computation of the composite scale for 'Expectations for Involvement', X_{13} . The remaining two exogeneous variables used in the path analysis were Delinquency Involvement, X_4 and Race, X_2 , which were not factor analyzed.

In Table II, the correlation coefficients between the questionnaire items and the two factors of cottage norms are presented. The table suggests that questionnaire items 1, 8 and 11 are highly correlated to Factor E. These three items asked the respondents how they thought most of the other boys in their cottage felt about fighting, being 'slick' and acting tough. For example, question 1 asked a respondent if he thought that "most of the other boys in this cottage feel you should be ready to fight other guys at most any time." These three items on fighting, being 'slick' and acting tough were assigned higher weights in computing the scale by which to measure the variable, 'Specific Cottage Norm' (X_6). Items 2, 3, 4, 5, 6, 7, 10 and 12 asked the boys how they perceived their cottage's norms with respect to a variety of types of behavior. Therefore, these items received higher weights in the scale measuring the variable, X_{14} , 'General Cottage Norm'.

Finally, a factor analysis was made of the questionnaire items measuring individual attitudes of the boys toward the school, staff and rules, while they were in the training school. The correlation coefficients between the questionnaire items and the three factors are presented in Table III.

TABLE II

Rotated Factor Matrix on Cottage Norms

<u>Questionnaire Items</u>	Factor D General Cottage Norm, = X_{14}	Factor E Specific Cottage Norm, = X_6
<u>Item Number</u>		
1	.265	.442*
2	.631*	.153
3	.561*	.212
4	.313*	.230
5	.693*	.217
6	.399*	.162
7	.359*	.199
8	.413	.510*
10	.494*	.482
11	.123	.930*
12	.487*	.409

TABLE III

Rotated Factor Matrix on In-training School Attitudes

Questionnaire Items	Factor F (Attitudes Toward Help X ₅)	Factor G (Attitudes Toward Involve- ment X ₁₂)	Factor H (Attitudes Toward Behavior X ₇)
Item Number			
43	.443*	.196	.042
44	.818*	.152	.121
45	.278	.025	.691*
46	.617*	.107	.326
47	.571*	.088	.142
48	.252	.220	.389*
49	.607*	.231	.245
50	.122	.588*	.111
51	.002	.196	.435*
52	.159	.800*	.175
53	.408	.048	.445*
54	.225	.707*	.117

All the questionnaire items on in-training school attitudes asked each boy his feelings about various aspects of the school, staff and rules. In Table III, the items heavily loaded on Factor F were as follows:

43. I think this is a good place to be, compared to what I

thought it would be like before I got here.

44. This is a place that helps boys, rather than a place to punish them.

46. I have been helped a great deal by my stay here.

47. The staff here are a lot of help to me on finding out why I got into trouble.

49. The staff members here are pretty fair.

As these questions centered around whether the boys felt they were receiving help from the staff by their stay at the school, this variable was named 'Attitudes Toward Help', X_5 .

Items 50, 52 and 54, loaded on Factor G, concerned whether a boy felt he should involve himself in the school programs while at the school. For example, item 52 was worded "I should do as well as I can in my school work subjects while I am here. Yes 1 Don't Know 5 No 0." These three items received higher weights in the construction of the scale to measure 'Attitudes Toward Involvement', X_{12} . Finally, items 45, 48, 51 and 53, loaded on Factor H, 'Attitudes Toward Behavior', X_7 and focused on how the boys felt they should behave while at the school; for example, whether to 'con' the staff and to act tough, items 45 and 51 respectively.

The purpose of the factor analysis of the questionnaire items on pre-training school expectations, cottage norms and in-training

school attitudes was to develop weighted scales by which to measure the resulting variables more precisely. To examine the validity and reliability of the resulting variables, use is made of the following two formulas (Bohrnstedt, 1969: 542-548):

1. Validity

$$r_{xy} = \frac{\sum_{l=1}^{m_1} \sum_{k=m_1+1}^{m_2} \sigma_l \sigma_k r_{lk}}{\sqrt{\sum_{i=1}^{m_1} \sigma_i^2 + 2 \sum_{l < j}^{m_1} \sigma_l \sigma_j r_{lj}} \sqrt{\sum_{j=m_1+1}^{m_2} \sigma_j^2 + 2 \sum_{k < i}^{m_2} \sigma_k \sigma_i r_{ki}}}$$

This is the formula for the correlation between two composites and r_{xy} indicates discriminant validity. That is, when a factor analysis yields several factors, the scales based on the factors may be highly correlated with each other. This raises the question of whether the various measures are actually discriminating among the concepts. For example, factor analysis of the items on pre-training school attitudes yielded three factors and composite scales were computed for each of these. Yet, it is important to calculate the correlation coefficients among these scales. For example, a fairly low correlation between X_1 , 'Expectation for Help' and X_3 , 'Expectation for Behavior' would indicate that the measures are

discriminating between these two concepts, i. e. have high discriminate validity (Bohrnstedt, 1969).

2. Reliability

$$\alpha = \frac{k}{k-1} \left[1.00 - \frac{\sum_{i=1}^k \sigma^2_i}{\sum_{i=1}^k \sigma_i^2 + 2 \sum_{i < j} c(V_i, V_j)} \right]$$

This is the formula for alpha which is a measure of reliability, assessed by the internal consistency method. Alpha measures the degree to which questionnaire items are indicators of the same underlying construction. The possible range for alpha is from 0.00 to 1.00, with higher alphas indicative of higher reliability. The reliability and validity coefficients are presented in Tables IV and V for only the variables that are used in the path analysis, i. e. those variables involved in statistically significant relationships. Specifically, these are X_1 and X_3 , pre-training school variables, and X_5 , X_7 , X_{14} and X_6 , in-training school variables. See Tables IV and V on the following two pages.

TABLE IV

Discriminate Validity for Variables Used in the Path Analysis

$$r_{X_1 X_3} = \underline{.24}$$

X_1 = Expectation
of Help

X_3 = Expectation
for Behavior

$$r_{X_5 X_7} = \underline{.007}$$

X_5 = Attitudes
Towards Help

X_7 = Attitudes
Towards Behavior

$$r_{X_{14} X_6} = \underline{.56}$$

X_{14} = General Cottage
Norm

X_6 = Specific Cottage
Norm

The low correlation coefficient of .24 between Expectation of Help (X_1) and Expectation for Behavior (X_3) indicates high discriminate validity. That is, the composite scales used to measure these two concepts are discriminating between the two concepts (Bohrnstedt, 1969: 542-543). Similarly, the low correlation coefficient between Attitudes Toward Help (X_5) and Attitudes Toward Behavior (X_7) indicates that the composite scales measuring these two concepts are discriminating between these two concepts. The two indications of discriminate validity for these concepts are important as these four variables (X_1 , X_3 , X_5 and X_7) are all used in the path diagrams to analyze the data. However, the higher correlation coefficient between General Cottage Norm, X_{14} and Specific Cottage Norm, X_6 indicates that the composite scales measuring these concepts are not discriminating well between these two concepts. Only X_6 , Specific Cottage Norm, is used in the path

TABLE V

Reliability Coefficients and Eigenvalues for Variables Used in Path Analysis*

a for $X_1 = \underline{.46}$	a for $X_5 = \underline{.58}$	a for $X_8 = \underline{.73}$
a for $X_3 = \underline{.54}$	a for $X_7 = \underline{.33}$	a for $X_6 = \underline{.08}$
Eigenvalues for $X_1 = \underline{1.73}$	Eigenvalues for $X_5 = \underline{3.65}$	Eigenvalues for $X_8 = \underline{1.64}$
$X_3 = \underline{.90}$	$X_7 = \underline{.59}$	$X_6 = \underline{.67}$

* X_8 = Clique Attitudes

analysis.

The reliability coefficients for the measurement of internal consistency reliability are quite low for X_7 and X_6 , rather low for X_1 and X_3 and somewhat higher for X_5 and X_8 . In essence, the reliability coefficients, using Bohrnstedt's alpha, are less than desirable for four of the six variables that were measured by composite scales, constructed from questionnaire items on the student questionnaires. However, the eigenvalues of three of the variables are greater than 1.00 (X_1 , X_5 and X_8) and the eigenvalue for X_3 , Expectation for Behavior is .90.

Questionnaires of the School Staff. The group discussion leaders and the cottage supervisors at the school completed

questionnaires evaluating, respectively, the boys' involvement in the discussion programs (X'_{10}) and their cottage behavior (X_{11}). For example, the group discussion leaders were asked: "To what extent does this boy actively involve himself; that is, actively take part in, your counseling program?" The boys were rated from "usually involves himself in the program", (+2) to "does not involve himself in the program", (-2). The score from the rating on this question was added to the score from a second question on how much a boy talks in the group, from "a lot" (+1) to "not at all" (-1). (Questions 1 and 3; Appendix C). The totaled scores were used to form a scale for the variable, use of counseling program. The range of possible scores for a boy was from -3 to +3 with higher positive scores indicative of greater involvement in the discussion program.

The cottage supervisors were asked three questions on: (1) the boys' cottage unit adjustment (2) their aggressiveness in the cottage and (3) their rule obeying behavior in the cottage (Questions 1, 2 and 3; Appendix D). The ratings on their cottage unit adjustment were from "excellent" (+2) to "very poor" (-2). For aggressiveness, the ratings were from "very aggressive" (-3) to "not at all aggressive" (0). For rule obeying behavior, the ratings were from "very obedient" (+2) to "very disobedient" (-2). Operationally, cottage behavior is defined in terms of a composite index score on the three questions,

with a range from +4 to -7, with higher positive scores indicative of more pro-social behavior.

Steps were taken to ensure the validity and reliability of these measures of the two dependent variables, X_{10} and X_{11} . The questions were pretested by having two social workers read the discussion leader questions and a training school staff member read the cottage supervisor questions. The purpose of this pre-test was to ascertain if the questions were understandable. To enhance reliability, identical letters were sent to all group discussion leaders and to all cottage supervisors with guidelines on filling out the questionnaires.

Examination of the Boys' Records. Data to measure the variables race and delinquency involvement was obtained from the records kept at the school. The dichotomous variable race was simply measured by coding whites as 0 and blacks as 1. The variable delinquency involvement was measured by the number of court appearances in which an adjudication was made. To increase reliability in the way in which the information on race and number of court appearances was collected, use was made of a set of guidelines for the students who examined the school records (Appendix G). This was to ensure that they were each recording the data on race and delinquency in the same manner.

Summary of Measurement Variables

In this section the measurement of the dependent and independent variables is briefly summarized.

Dependent Variables. The two dependent variables, comprising the concept adjustment in school, were operationally defined as follows:

1. Use of Group Counseling Program (X_{10}) was measured using an index of scores ranging from -3 to +3.
2. Cottage Behavior (X_{11}) was measured using an index of scores ranging from -4 to +7.

Independent Variables. For uniformity, most of the variables were scored from low (negative numbers for anti-social responses) to high (positive numbers for pro-social responses), with 'don't know' responses coded 0. This scoring applies to the variables concerning pre-training school expectations, cottage norms, in-training school attitudes and clique attitudes. The five pre-training school variables were operationalized as follows:

Delinquency Involvement X_4 - This variable was measured by the number of court appearances, ranging from 1 to 9, with a mean of 2.55.

Expectations of Help (X_1), for Behavior (X_3) and for Involvement (X_{13}) were all measured by weighted scales, with Race (X_2)

coded as 0 or 1. The seven in-training school variables were operationalized as follows:

General Cottage Norm (X_{14}) and Specific Cottage Norm (X_6) were measured by weighted scales.

Attitudes Toward Help (X_5), Involvement (X_{12}) and Behavior (X_7) were also measured by weighted scales.

Clique Attitudes (X_8) - This variable was measured by the scores from questions of the boys on the attitudes of his closest friends.

Length of Stay (X_9) - This was measured with data from a question of the boys on how long they had been at the school, in terms of weeks. For the path analysis, the base 10 log of the length of stay was used as these partial correlations tended to be higher than when using length of stay by itself.

Plan of Analysis

The analysis of the data is presented in two sections:

1. A descriptive section, Chapter IV, sets forth the training school goals, programs, and a description of the social systems of the cottages.
2. An hypotheses testing section, Chapter V, presents the data bearing upon the six theorems of the study in the form of path analytic models.

Use of Path Analysis. The decision was made to employ path analysis as the statistical tool by which to analyze and interpret the data. Path analysis seemed particularly appropriate because it readily lends itself to analysis of the central theoretical question of the study, i. e. the relative impact of pre-training school variables and in-training school variables upon the boys' adjustment in the school. By this is meant that there was a time dimension from pre-training school variables to in-training school variables to the school adjustment variables and analysis of the path coefficients between these three sets of variables would shed light upon the various relationships. Use of path analysis provided the analysis of:

1. The direct effects of the pre-training school variables upon school adjustment variables.
2. The direct effects of in-training school variables upon school adjustment variables.
3. The indirect effects of the pre-training school variables to the school adjustment variables as mediated through the in-school variables.

Some authors have used path analysis in types of analysis that are roughly comparable to that of the present study. Braungart (1971: 108-128) used this technique to analyze the relationship of family status to student politics as mediated through socialization.

He found that the combination of family status variables and the intervening variable of socialization explained a significant amount of variation in student politics. The point is that previous research had involved only bivariate relationships between family status and socialization, family status and politics and socialization and politics. By use of path analysis, it was possible to examine not only these direct effects, but also the indirect effects and the total effects of family status variables and socialization upon student politics. Bayer (1969) also used path analysis to trace the direct and indirect effects of several independent variables upon the dependent variable of marriage age. He found that marriage plans had greater relative influence upon marriage age than socio-economic status.

In deciding to use path analysis, consideration was given to the use of multiple and partial correlation to statistically analyze the relationships among the training school variables. However, path analysis would test for the direct effects of the independent variables upon the dependent variables, as would correlation, but also would enable the tracing of indirect effects of some independent variables upon dependent variables as mediated through other independent variables. This last point is important because the indirect effects of pre-training school variables upon school adjustment could be traced as mediated by the in-training school variables.

In the path analysis, use is made of tests of significance of the path coefficients. The literature on the use of tests of significance on non-random or non-probability samples is controversial, as noted in the references cited below. The sample for the present study was not randomly selected from a larger population of training school boys. Also, it was not selected according to any other probability procedure. It consisted simply of those 150 boys, from a total group of 172 training school boys, who completed the questionnaires. Some authors argue that since tests of significance are to determine the probability that the observed relationship is not due to random errors that if one does not have a randomly selected sample, it is incorrect to use tests of significance (Selvin, 1957: 84-106 and Morrison and Henkel, 1970: 305-311). Other authors point out that tests of significance do not show the strength of relationship among variables (Dugan and Dean, 1968: 161-165) nor do they assess causality (Selvin, 1957: 94-106). Morrison and Henkel (1970: 305-311) and Lyken (1968: 267-269), suggest that use should be made of theoretical considerations and replication studies, instead of tests of significance, to examine relationships among variables.

On the other hand, several authors argue in favor of the use of tests of significance. Davis (1958: 91-94) and Winch and Campbell (1969: 199-206) suggest that, at the very least, tests of

significance represent a formal criterion and one source of evidence by which to evaluate an hypothesis. Beshers (1958: 111-112) notes that scientific inference can be used to unravel causal relationships, using statistical inference via tests of significance to determine the probability of error in generalizing from a sample to a population.

The decision was made to use tests of significance of the relevant path coefficients of hypotheses based upon the following reasoning. One, as noted by Namboodiri, Carter and Blalock (1975: 4-10), "statistical analysis of data sets need not assume that the subjects involved have been selected at random or some other probability basis from a fixed population." The population to which inferences are made can be considered a hypothetical population resulting from hypothetical replications of the study. Also, tests of significance provide one formal criterion, accepted by many sociologists, by which to evaluate the relationships of the study. Further, path coefficients in the path analytic model will indicate the direction of relationships for the hypotheses of the study. Finally, use will be made of theoretical considerations to unravel the causal relationships among variables.

Assumptions of Path Analysis. As suggested by Heise (1969: 44-59), the following assumptions have been made in the use of the path analysis diagrams to be presented:

1. Change in one variable occurs as a linear function of changes in the other variables so that; for example, there are no curvilinear relationships.

2. The causal laws governing the system are established sufficiently to specify causal priorities in a way that is undebatable. Heise (1969: 52) notes that "the requirement is not for a full-scale theory in the sense of specifying every causal path, but rather for a partial theory which simply permits ordering the variables in terms of their causal priorities." The theoretical model in the present study orders the pre-training school variables of race, delinquency and pre-training school expectations as prior, in time, to the in-training school variables of norms, cliques, in-training school attitudes and length of stay. Race and delinquency involvement obviously occurred prior to the in-training school variables and pre-training school expectations were measured by questions asking the boys to recall their expectations upon arrival at the school. It is assumed, as set forth in the theoretical model, that the flow of causal influence is from these independent variables to the dependent variables of use of the program and cottage behavior.

3. The system of concern contains no reciprocal causation or feedback loops. This assumption seemed acceptable, with the one exception of the relationships between length of stay and the two dependent variables. In the path diagrams, use was made of

the path coefficients from length of stay to use of program (X_{10}) and from length of stay to cottage behavior (X_{11}), as set forth in the theory.

4. The disturbances of dependent variables are uncorrelated with each other or with the inputs. This assumption involves the problem of spurious correlation. That is, it is assumed that the correlations "are a function of only the variables being considered and are not due to the mutual dependencies of some variables on other variables outside the model" (Heise: 1969: 56).

5. The measuring instruments used to obtain empirical data have high reliability. The reliability of the three test instruments (students questionnaires, staff questionnaires and use of school records) was indicated previously. The reliability for the variables measured via student questionnaires was less than desirable. However, the reliability for the variables from data in the school records, on delinquency involvement and race, can be assumed to be more reliably measured as can the variables from the staff questionnaires. Thus, two of the three measuring instruments would seem fairly reliable.

6. The usual methodological assumptions involved in multivariate analysis are met. These assumptions (Heise, 1969: 57) are as follows:

a. It is assumed that the measurements are made on

interval scales or at least reasonable approximations. Although some authors stress the necessity of interval scale measurement for the use of correlation techniques (Stevens, 1946 and Andreas, 1960), the thrust of the more recent literature is that the use of both correlation techniques and path analysis with ordinal level scales is acceptable (Burke, 1963; Borgatta, 1968; and Labowitz, 1970). Therefore, it is felt that the use of ordinal level measurements on the attitude and norm variables and the two dependent variables in the present study is acceptable. Also, length of stay and delinquency involvement are interval scales.

b. The assumption of homoscedasticity is required.

As noted by Bohrnstedt and Carter (1971: 123-124), "it is assumed that for every level of X, the variance is a constant, σ^2 . For example, it would seem untenable to suppose that the variance in dollars contributed to the local community chest is constant across all categories of income. Specifically, one would hypothesize that there is little variation in donations at the lower-income levels and large variation in the upper-income categories."

It seems quite reasonable to assume that there were not instances of gross heteroscedasticity among the variables in the path analytic system. For example, there is no theoretical reason to assume that the variance in use of programs or in cottage behavior is greater for some levels of the independent variables than for other levels. Further, Bohrnstedt and Carter cite several studies that suggest that regression analysis is fairly robust with respect to the

homoscedasticity assumption, except in cases of gross heterogeneity.

c. It is assumed that there is not extreme multicollinearity or large correlations between the independent variables. Inspection of the correlation coefficients among the independent variables revealed that the correlations were not extremely large. The highest correlation among the endogenous, in-training school variables was .27 between X_6 , specific cottage norm and X_7 , attitudes toward behavior.

In sum, it is concluded that the assumptions for path analysis are met adequately enough for the use of path analysis.

Chapter IV

DESCRIPTION OF THE TRAINING SCHOOL

To establish an understanding of the training school in which the present study was conducted, this chapter sets forth a description of:

1. The Training School: its relationship to the broader community and its goals and treatment programs.
Included at this point is also a summary description of the boys' evaluation of these programs.
2. The social systems of the school cottages: their norms, stratification systems and group memberships.

The Training School

The Maryland Training School is an institution for delinquent boys that has been in existence for about sixty years. In recent years the school has undergone a major shift from a quasi-military model to a model emphasizing rehabilitation (Hilson, 1973). The campus of the school is divided into two separate, distinct sections: the senior or committed section and the detained section. The present study concerned only the students in the committed section.

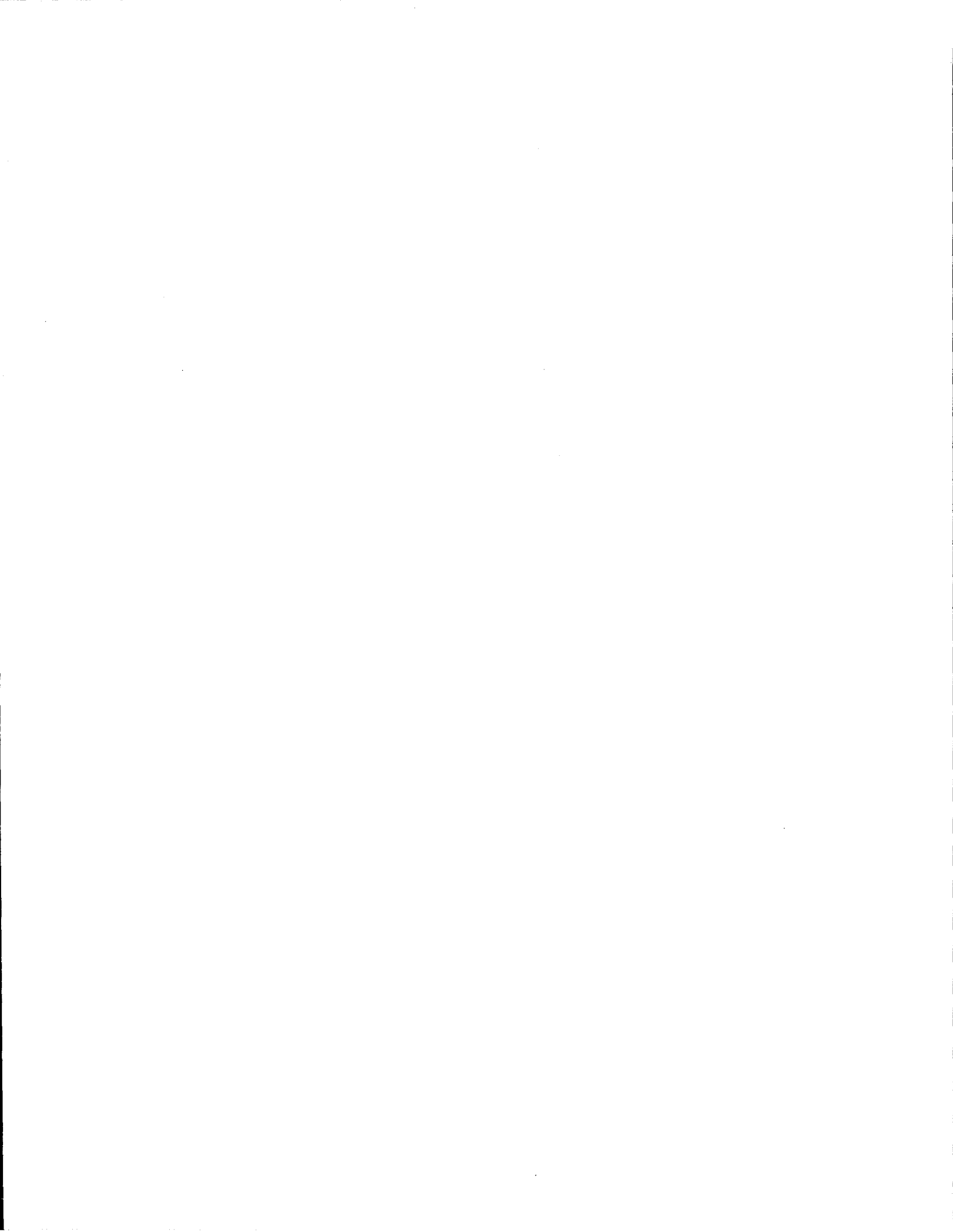
These are boys committed by courts from five regions throughout the state of Maryland (Report of Department of Juvenile Services, September 12, 1974). About 75% of the boys admitted to the committed section of Maryland Training School, in the fiscal year 1974, were from Region V; of which about 85% were from Baltimore City. There were more boys (262) committed to Maryland Training School in that year from Baltimore than the combined total committed from the 23 counties of the state (141 boys).

Relationship of Maryland Training School to Broader Community.

"The Maryland Training School for Boys is the largest of the institutions under the jurisdiction of the Department of Juvenile Services and is supported by state funds" (page 20, Programs and Facilities, 1972). The position of Maryland Training School in relation to other services for juvenile offenders in the state of Maryland is depicted in the organization chart on the next page.

Goals of Maryland Training School. The goals of the school are three, interrelated ones: subsumed under their major goal of modifying or changing attitudes (Hilson, 1973). The three specific goals are:

1. To strengthen educational weaknesses and provide continued growth on an academic level, with a heavy thrust in vocational skill training.
2. To modify each student's attitudes, through relationships



CONTINUED

1 OF 3

Major Program Organization Chart

Department of Health and Mental Hygiene

Department of Juvenile Services - Headquarters

Juvenile Rehabilitation Institutions

*Maryland Training
School

Boys' Village

Montrose School

Boys' Forestry Camps

Juvenile Court Services

Dorchester, Wicomico
Somerset, Worcester

Caroline, Cecil, Kent
Queen Anne, Talbot

Baltimore, Harford

Allegany, Garrett,
Washington

Anne Arundel, Carroll,
Howard

Frederick, Montgomery

Calvert, Charles, Prince
George, St. Mary

Baltimore City

Community & Residential Services

Group Homes

Maryland
Children's Center

T. J. S. Waxter
Center

with staff and other students, so that he can return to the community with something positive. Use is made of behavior modification theories and techniques to implement this objective.

3. To introduce a total involvement of concern for others via a heavy emphasis upon group participation.

Programs of Maryland Training School. The programs to implement the preceding three goals are, respectively:

1. The School Program: "a non-graded, individually prescribed academic and vocational program, with a stress upon teaching each boy a vocational skill. As the boys are sixteen to eighteen years of age and the majority of them will not likely return to public schools, it is important to teach them a specific skill that will enable them to get a job." (B. P. C., A Residential Treatment Program, Maryland Training School for Boys, 1974). The academic program is entirely remedial in nature, with a stress upon reading skills. The students can advance 1.9 grades in reading in a six month period and the importance of this is clear when one recalls the very low reading levels of the boys.
2. The Point System: a program by which "points are earned by the students in the entire committed program for meeting

objectives established in any number of areas; for example, education, social behavior and cottage assignments. These points are then a reward for positive behavior in that they can be used in exchange for a variety of goods in the school storeroom such as candy, cigarettes and records." (B.P.C. A Residential Treatment Program, Maryland Training School for Boys 1974).

3. Discussion Group Program: there are discussion groups, two per cottage, to which all students are assigned upon commitment. The boys "work, learn and play with their respective groups and have nightly meetings in which they are charged with discussing each others' problems. The meetings are guided by staff group discussion leaders. Each individual's assessed needs are made known to the group and the group members are responsible to help each other reach the objective as written." (B.P.C., A Residential Treatment Program, Maryland Training School for Boys, 1974).

Summary of Boys' Evaluations of the Programs. Ten items were included in the questionnaires administered to the boys in the sample to tap their opinions on the above three programs. The ten items to which the boys at the training school responded allowed them to evaluate whether they felt the programs had helped them,

and whether they felt the programs were 'good', 'bad' and so forth. (Appendix B, Opinion Survey, Items 55-64). The data to follow is on the 150 boys in the sample. The scores presented are means, by cottage units, with higher scores indicating more favorable opinions and greater use of the programs.

TABLE VI

Boys' Evaluation of the School Program

<u>Cottage Unit</u>	<u>Evaluation Scores</u>
A	7.86
B	6.57
C	6.96
D	7.44
E	7.58
F	7.13
Mean Score, for Six Cottages	<hr/> <hr/> 7.19

As the possible range of evaluation scores was from a low of 0.00 to a high of 10.00, it seems that the boys' overall evaluation of the school program, 7.19, is fairly favorable. Analysis of variance of the above cottage mean scores yielded an F score of .9774, which indicates a lack of significant differences between the cottages in their evaluation of the school program.

TABLE VII

Boys' Evaluation of the Point System Program

<u>Cottage Unit</u>	<u>Evaluation Scores</u>
A	8.18
B	6.26
C	7.96
D	6.24
E	7.62
F	7.92
Mean Score	<u>7.36</u>
for Six Cottages	7.36

As the range of possible scores was from 0.00 to 12.00, it seems the boys' overall evaluation of the point system 7.36, is rather favorable, but not quite as positive as that of the school program. Also, an F of 2.267, via analysis of variance, indicates significant differences, at the .05 level, in cottage mean scores for the evaluation of the program. Unit A is rather favorable in its evaluation, as compared to Units B and D. The differences between Units A and B in their evaluations of both the school program and the point system are similar, with Unit A markedly more favorable to both programs than Unit B. The two programs are inter-related in that much of the awarding of points is based upon the boys' behavior in the classroom. Therefore, it seems consistent that boys favorable toward one type of program might also be favorable toward the other program.

TABLE VIII

Boys' Evaluation of the Discussion Group Program

<u>Cottage Unit</u>	<u>Evaluation Scores</u>
A	6.38
B	7.04
C	6.50
D	6.15
E	6.96
F	6.08
Mean Score, for Six Cottages	<hr/> <hr/> 6.52

As the possible range of scores was from 0.00 to 10.00, it seems the boys' opinion and use of the discussion programs is also fairly good. Analysis of variance of the evaluations of the discussion group program yield an F score of .7847, which is not significant at the .05 level.

TABLE IX

Summary of Boys' Evaluation Scores on Three Programs

<u>Cottage Unit</u>	<u>School Program</u>	<u>Point System</u>	<u>Discussion Group Program</u>
A	7.86	8.18	6.38
B	6.57	6.26	7.04
C	6.96	7.96	6.50
D	7.44	6.24	6.15
E	7.58	7.62	6.96
F	7.13	7.92	6.08
Mean Score, for Six Cottages	<hr/> 7.19	<hr/> 7.36	<hr/> 6.52
Possible Range of Scores	0.00 to 10.00	0.00 to 12.00	0.00 to 10.00

Somewhat of a pattern emerges when the evaluations are summarized. The boys of Units A and E appear to be, in general, most favorably disposed toward the programs. Those in Units B and D seem least favorable toward the programs. In sum, the programs are evaluated rather positively by the boys, with very little difference in the evaluations of the programs between cottages. More specifically, there is a significant difference, between cottages, only in the evaluations of the point system. It is interesting to note that of thirty-seven boys responding to why they felt their group of close friends liked the staff, twenty-five of the reasons given pertained to the staff helping them (Item 26a, Opinion Survey, Appendix B). Two answers were not understandable and the remaining ten reasons varied such as the staff is fair, they care or are nice. A slight pattern emerges with two cottages, A and E, generally more favorable to the staff than Units B and D. That is, there were no positive responses in Unit D about why the boys' cliques liked the staff and there were seven and six responses about staff that were positive in Units A and E respectively.

The Social Systems of the Cottages

An interpretation of the cottage social systems is presented in terms of the criteria used by the school staff for assignment to the various cottages. The boys are assigned to the different cottages

based upon several criteria for placement:

1. Key Behavior Patterns: Usually one behavior pattern stands out though others are present. Some students can get along in any group, others can make it only in one particular group, and a few will have maximum difficulties in any group.
2. Reading Comprehension Grade Level: Reading Comprehension grade level and vocational shop-students with similar grade levels work well together; however, environmental and personality factors affect the ability to relate to peers. Examples: secure streetwise students may use ability better in groups while anxious, insecure students may not. Non-readers should have a maximum effort made towards their improving reading and math.
3. Age Maturity: Higher maturity means evidence of moving towards independent living, the ability to readily relate to peers by own choice and the ability to be serious and careful around dangerous machinery and equipment.
4. Primary Offenses: These are the main offenses for which boys are committed to the school.
5. Usual Family Relationships: These are the types of relationships that the boys have with their parents.

Attempts are made to assign similar boys to a cottage, based

on these criteria. For example, boys who are somewhat disturbed and/or insecure in their behavior, of low reading and maturity levels and from strong but conflictual family relationships are assigned to Unit A. Also, these boys have often committed offenses such as breaking and entering, stealing and use of drugs. In contrast, boys who are instigative and anti-social in their behavior, of higher reading and maturity levels and have committed more serious offenses such as assault are assigned to Unit B. The criteria for placement in the remaining four cottages are presented in Figure 1, on the next page.

The assignment procedure serves to facilitate the planning and implementation of treatment programs. The treatment emphasis for Unit A involves reassurance, consistency in daily programs, a comfortable tranquil atmosphere, a high amount of individual counseling and a focus on individual problems and concerns. This emphasis is geared to the more insecure and immature boys in this unit. In contrast, the treatment emphasis in Unit B is more upon tight supervision, high program structure and constant accountability and confrontation regarding behavior. This treatment emphasis seems particularly suited for the more instigative, anti-social, more serious offenders who are assigned to Unit B. The treatment emphasis for each of the remaining four units is set forth in Figure 2, on page 88.

Figure 1

CRITERIA FOR PLACEMENT OF STUDENTS IN THE COTTAGES

Effective 2/24/75

<u>Unit</u>	<u>Shop</u>	<u>Key Behavior or Experience**</u>	<u>Reading Comp. Gr.</u>	<u>Primary Offenses</u>	<u>Age Maturity</u>	<u>Usual Family Relationships</u>
A	Auto	Anxious about self, insecure disturbed	2.0+	Breaking & Enter. Stealing Drugs	15.0+ Low	Strong but conflictual
B	Appliance Repair	Instigative, anti-social even to peers	4.0+	Assault, various drugs	16.0+ Med.- High	Rejecting-hostile or seductive
C	Small Engine Repair	Indecisive, followers	0.0- 5.0	Breaking & Enter. various offenses	16.0+ Low	Father-weak, Mother-conflict
D	Trowel Trades	Sophisticated, gang-oriented, loyalty to peer group	4.0+	Deadly weapon, assault, robbery	16 1/2+ High	Warm at least to mother
E	Wood	Immature, gang-oriented	4.0+	Breaking & Enter., assault, steal	15.0+ Low-Med.	" " " "
F	Dry Cleaning	Family deprivation, extensive living away from parents	0.0+ - 6.0	Unauth. use, Breaking & Entering	15.0+ Low - Med.	Very weak, non-existent

(Continued on next page)

Figure 2

VARIABLE GENERAL TREATMENT EMPHASIS IN THE UNITS
IN THE COMMITTED PROGRAM

<u>UNIT</u>	<u>TREATMENT EMPHASIS</u>
A	Reassurance, consistency in daily program, comfortable tranquil atmosphere, high amount of individual counseling and focus on individual problems and concerns.
B	Constant accountability and confrontation regarding behavior, a high level of anxiety about meeting needs, tight supervision, high program structure, and emphasis on high achievement and high status roles with rewards given emphasized.
C	Training in social relations through group process and short counseling sessions (known as "ballroom", "follow-along" and "curbstone counseling"), and constant direction and reassurance.
D	Firm staff clarification of acceptable and unacceptable behavior enforced by the group process, flexibility in minor daily matters, job orientation, counseling to cause student to orient himself to attitudes and behaviors socially acceptable and rewarding - causing students to have high expectations for themselves, and keep the group anxious in order to get them to help individual members.
E	High behavior and achievement expectations, student management of minor daily matters and maximum performance strongly encouraged.
F	Direction giving program in social relations, personal care and task performance reinforced by the group process and directive supervision. Positive reinforcers used to enhance a student's self-esteem and use of his ability.

NOTE: Group process and responsibility is the main emphasis of all unit programs; however, the nature of the process and the extent students are given responsibility is dependent both upon the other above listed emphasis and how well a group and/or unit is carrying its responsibilities at any given time.

Cottage Norms. These are the informal standards of expected behavior in a cottage unit that would stress pro-social or anti-social conduct for the cottage residents. The cottage norms are operationalized via twelve questions of the sample of 150 boys regarding the standards of cottage behavior in their cottages. The questions were worded to ascertain what each boy felt that most of the boys in his cottage regarded as proper behavior. Specifically, the cottage norm scores listed below are the proportions of the boys' responses, by cottages, that were pro-social. Therefore, higher percentage scores indicate more pro-social cottage norms.

TABLE X
Cottage Norms

<u>Cottage Unit</u>	<u>Norm Score</u>	<u>Cottage Unit</u>	<u>Norm Score</u>
A	.61	D	.42
B	.39	E	.59
C	.52	F	.48

Mean Norm Score, for Six Cottages = .50

Analysis of variance yielded an F score of 2.7292, indicating significant differences, between cottages, in their cottage norm scores. Units B and D are more anti-social than Units A and E. Polsky and Claster, 1968 make the point that the three cottages they studied did differ in the types of norms, from pro-social to anti-social. The primary offenses for the boys in Units B and D are of a more serious nature than those of boys in the other cottages. That

is, the primary offenses for boys in these two units included assault, use or possession of a deadly weapon and robbery. Thus, perhaps boys who have been involved in offenses of a more serious nature have more anti-social attitudes and when groups of these boys interact in a cottage, they develop more anti-social cottage norms.

Cottage Stratification System. Conceptually, this refers to:

1. Whether there are ranking systems in the cottages in the sense of a small group of leaders with influence over the other boys in the cottage, measured simply by a question as to whether there was a top group of leaders in their cottage.
2. The criteria most often used, by the boys themselves, to characterize the leaders, such as tough, honest, 'slick' and eight other criteria.

There are rather sharp differences in the percentages of boys, by cottages, who feel there is a top group of leaders in their cottage. It would seem there probably is a top group of leaders in Units A, B and E. However, in the remaining three units, particularly Unit D, it seems questionable that there is a clearly established and generally recognized group of top leaders. This is at odds with the observations of Polsky (1962) who noted a definite stratification hierarchy, with a small clique of boys at the top, in the cottage he studied. The structure he observed ranged from a top leadership

TABLE XI

Percentage of Boys Indicating a Top Group of Leaders and the Criteria for Leadership

<u>Cottage Unit</u>	<u>Percentage of Boys Indicating There Was a Top Group of Leaders</u>	<u>Criteria for Leadership*</u>
A	73%	Tough (8) Honest (7) 'Slick' (6)
B	67%	Good Personality (11) Good Athlete (6) Kind (6) Honest (6)
C	55%	Good Personality (11) Smart in School (10) Tough (8) Good at Conning (8) Good Fighter (8)
D	42%	Good at Conning (8) Good Fighter (7) Slick (7)
E	65%	Good Fighter (9) Good Personality (8) Tough (7) Honest (7)
F	50%	Slick (7) Tough (5) Good Fighter (5)

* The three most often checked responses are presented, with the frequency of these responses given in parentheses.

clique down through the scapegoat. However, it may be there are top groups of leaders in all of the six cottages, but the boys in some of the cottages may be more reluctant to acknowledge the existence of such a group. Also, the cottage unit studied by Polsky included boys with an average stay of about eighteen months whereas the average length of stay for boys in the present sample was about four months. Therefore, the lesser time of interaction may not have permitted the development of a fully recognizable leadership clique in some of the cottages.

It is interesting to note that of the criteria for leadership most often checked among all the boys, pro-social criteria for leadership are checked almost as often as anti-social criteria. The number of responses for each of these two types of criteria are as follows:

<u>Pro-social Criteria</u>	<u>Anti-social Criteria</u>
Good Personality (30)	Tough (28)
Honest (20)	Slick (20)
Smart in School (10)	Good Fighter (20)
Good Athlete (6)	Good at Conning (16)
Kind (6)	
<hr/> 72	<hr/> 84

This is illustrative of a point made by Gibbons (1970) that often the criteria for leadership in a training school are similar to those among teenagers generally. The values that emerge among the anti-social criteria are illustrative of those that Polsky, 1962 stresses as major values in the cottage system he studied. For example, he observed hardness, aggression and being 'wise' as

three major values in Cottage Six. These seem comparable, respectively, to the criteria for leadership of tough, being a good fighter and being 'slick' and good at 'conning.'

Some very curious results are observed when the cottage norm scores are compared to the criteria for leadership in the different cottages. That is, it would seem that the top leaders would greatly influence the types of norms in the cottages. Polsky, 1962 observed that the leadership clique, the toughs, set the tone for the cottage. The tone established by these cliques might be cooperative with staff in one cottage and uncooperative in another cottage. It seems reasonable to expect that cottages in which the major criteria for leadership are anti-social, for example, tough, would be cottages in which the norms are generally more anti-social. Also, cottages in which the major criteria for leadership are pro-social should be those cottages having more pro-social norms.

The results of Unit D are consistent with the expectation that an anti-social leadership clique will help establish anti-social norms in a cottage. Yet, it should be noted that only 42 percent of the boys in this cottage felt that there was a top group of leaders in the cottage. Units C and F have norm scores too close to the mean for the six cottages, .50, to be considered as having either pro or anti-social norms. Also, in Units C and F there were only about one-half of the boys in each cottage who felt there was a top leadership clique.

TABLE XII

Criteria for Leadership and Cottage Norm Scores

<u>Cottage Unit</u>	<u>Criteria for Leadership*</u>	<u>Cottage Norm Score**</u>
A	Pro-social (7) Anti-social (14)	.61
B	Pro-social (29) Anti-social (0)	.39
C	Pro-social (21) Anti-social (24)	.52
D	Pro-social (0) Anti-social (22)	.42
E	Pro-social (15) Anti-social (16)	.59
F	Pro-social (0) Anti-social (17)	.48

* Pro-social criteria are Honest, Good Personality, Good Athlete, Kind and Smart in School. Anti-social criteria are Tough, 'Slick', Good at 'Conning' and Good Fighter.

** Higher Cottage Norm Scores Indicate More Pro-social Cottage Norms.

The results that are surprising are those of Units A and B. That is, Unit A, having pro-social norms (.61), has a stress upon anti-social criteria for leadership. Also, nearly three fourths of the boys in this cottage felt there was a top leadership clique. Most curious are the results for Unit B, which has the most anti-social norm score (.39). The results are curious in that the criteria for leadership are totally pro-social ones. Two-thirds of the boys in

this cottage indicated there was a top leadership clique in their cottage. There are several possible explanations for the surprising findings for Units A and B. One explanation is that leaders do not necessarily set the norms of the cottages. It should be noted that the number of leaders in Units A and B, as indicated by the respondents, was about three boys in each cottage. This leader group then is only 10 percent of the total of about 30 boys per cottage. The questionnaire items used to measure norms were worded to tap what most of the boys of the cottage felt were the proper standards of behavior for the cottage. A second possible explanation is that leaders who are tough, good fighters, slick and good at conning are not necessarily opposed to staff and rules of the training school. That is, anti-social leaders may not necessarily stress cottage norms opposed to the staff and rules of the school. Several questionnaire items on norms measured the normative behavior regarding the relationships to staff, for example. Finally, there may be several different dimensions or factors of the concept cottage norms, with the cottage leaders instrumental in establishing only certain types of norms.

Group Membership. Conceptually, this refers to the cottage cliques, or small groups of very closest friends, with whom a boy hangs around most in the cottage. It was operationalized by one question, with choices ranging from 0 to 6 or more friends (Appendix

B, Opinion Survey, item 25). A boy who circled just "more" was scored as 7 and distinguished from a boy who circled just "6."

Almost all of the boys in the sample had at least one very close friend in the cottage. More specifically 132 of the 150 boys indicated having one or more close buddies with whom they hung around most at the training school. The mean number of closest friends was just over 3 members (3.25). The relationship of the attitudes of these cliques to the boys' adjustment in the training school will be analyzed in the next chapter.

There are not marked differences in the mean numbers of closest friends, by cottage, except for cottage F. That is, the mean number of closest friends, by cottage, was as follows:

<u>Cottage Unit</u>	<u>Mean Number of Closest Friends</u>
A	3.40
B	3.30
C	3.50
D	3.50
E	3.90
F	1.90

The lower mean number of closest friends in Unit F may be partly accounted for by the nature of the boys in Unit F and the nature of their family relationships. As noted in Figure 1, on page 87, many of them are of low to medium maturity which includes some inability to readily relate to peers by their own choice and are from very weak to non-existent family relationships. They have had

great family deprivation and extensive living away from parents (Figure 1, Criteria for Placement of Students in the Cottages). They may have been socialized in a manner that did not include the learning of ease of interaction with others.

The finding that 18 boys circled "0" close friends in the cottage was, at first, a surprising result. That is, it seemed curious that some boys would not have any close friends in the cottage and if they did not have any it seemed curious that they would admit this. However, upon reflection it seems that a few of these 18 boys may have close friends in other cottages. Also, some of the other of the 18 boys may still feel most close to friends in their home community. Finally, as noted by Polsky, 1962 there can be isolates from the cottage group.

In summary, Maryland Training School is an institution for delinquent boys in which the major goal is modifying attitudes. Three programs used to implement this major goal are the school program, the point system and a group discussion program. In general, the boys' evaluations of these three programs are fairly favorable. There are not any major differences, between cottages, in the boys' evaluations of these three programs. However, when the boys' evaluations of all three programs are summarized, by cottages, it appears that the boys in Units A and E are, in general, more favorably disposed to the programs than the boys in Units B

and D. This may be partially accounted for by the nature of the boys assigned to these different units. In general the boys placed in Units B and D are more anti-social than those in A and E as indicated by their behavior and more serious types of offenses.

There are clearly social systems within each of the cottages in terms of cottage norms, informal groups of about three members and, in three of the six cottages, a leadership group recognized by about two-thirds of the cottage members. The norms of the cottages differ some, with Units A and E having more pro-social norms than Units B and D. Again, this may be partially accounted for by the more anti-social nature of the boys assigned to Units B and D. Another possible explanation for the different cottage norms may be in the different roles played by staff members of different cottages. Polsky and Claster, 1968 concluded in their study of three cottages that an exclusive emphasis upon the custodial functions of the cottage supervisor role was related to the development of peer groups in a cottage centered around anti-social roles and values. However, as there is no data in the present study on the roles of cottage staff, there is no way to draw any conclusions about the apparently different norms of some of the cottages. Finally, there were some surprising findings on the criteria for leadership in the cottages and on the apparent lack of any association between type of leadership criteria and type of cottage norms. That is, nearly

one-half of the most often checked criteria for leadership were of a pro-social nature such as kind and honest. Also, one cottage, Unit A in which anti-social criteria for leadership were predominant was the cottage with the most pro-social norm score and the cottage in which totally pro-social criteria were most often checked, Unit B, had the most anti-social norm score.

Chapter V

ANALYSIS AND INTERPRETATION OF RESEARCH FINDINGS

Use is made of path analysis in order to analyze the data in terms of pre-training school variables, in-training school variables and training school adjustment. First, a path diagram is presented showing the statistically significant relationships of the pre-training school variables and in-training school variables to use of the counseling program. Then, a path diagram is presented displaying the statistically significant relationships of these independent variables to cottage behavior. These diagrams, including the path coefficients, are interpreted and compared in terms of the theoretical model and hypotheses set forth in Chapter II. The objective of this analysis and comparison is to draw conclusions with respect to the direct effects of pre-training school variables and in-training school variables upon the adjustment of boys in a training school. As well be recalled, the comparison of the relative influence of these two sets of variables is the central theoretical question of the study.

Next, path diagrams are presented for both use of counseling

programs and cottage behavior, illustrating the statistically significant relationships from pre-training school variables to the in-training school variables to each of the dependent variables. Also, predicted values for correlations among variables are presented, from path estimation equations derived from the two path models. The predicted values are compared to the observed correlations, in order to judge the goodness of fit of the models.

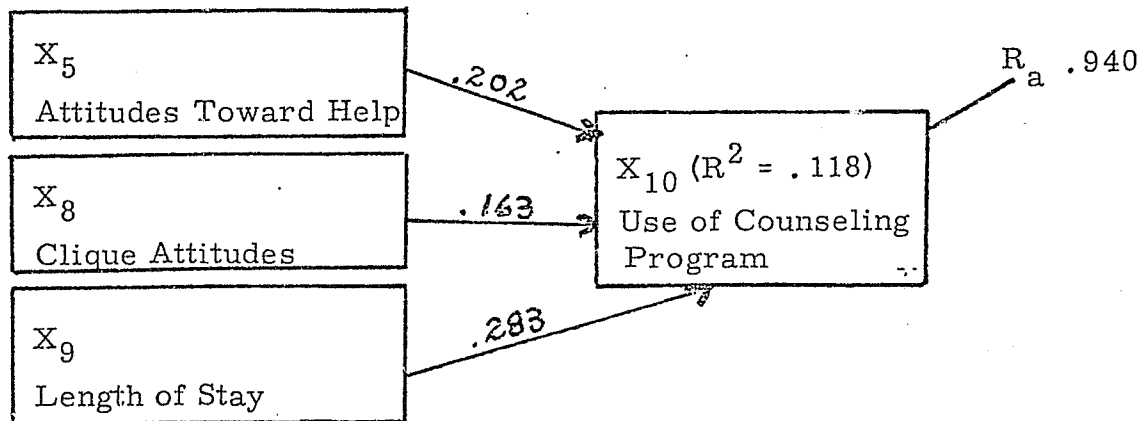
From the analysis and interpretation of all the path diagrams, two new theoretical models are proposed, incorporating the most theoretically meaningful and statistically significant variables by which to explain the adjustment of boys in training schools. One model focuses upon use of counseling programs, while the second model focuses upon cottage behavior. These revised models, derived from data and theory in the present study, might serve to guide future research on the adjustment of boys in training schools.

Use of Counseling Program (X_{10}) --- Direct Effects

As will be recalled, X_{10} is a dependent variable meaning the extent to which the boys actively involve themselves in the group counseling program in the school. The statistically significant relationships, as indicated by the path coefficients between the independent variables and use of the counseling program, are

depicted in the following path diagram, Figure 3.

Figure 3. Path Diagram for Use of Counseling Program*



* Significant at the .001 Level

In-training School and Pre-training School Variables. It is immediately apparent from the path diagram that attitudes toward Help (X_5), clique attitudes (X_8) and length of stay (X_9) are statistically related to use of the program (X_{10}), at the .001 level of significance. Also, the relationships of the three in-training school variables to the dependent variable, X_{10} are in the theoretically expected direction. That is, more pro-social attitudes toward help, more pro-social clique attitudes and greater length of stay are each related to greater involvement in the group counseling program. Length of stay, attitudes toward help and clique attitudes produce, respectively, .283, .202 and .163 amounts of change in the dependent variable. It should be noted that the effect of measure-

ment error is to decrease the correlations among variables.

Therefore, the path coefficient presented is a conservative estimate of the amount of change in the dependent variable, as the validity and reliability of measurement of variables were not as high as desirable.

The variance in X_{10} explained by these three variables is 6.8% by length of stay, 2.7% by attitudes toward help and 2.3% by clique attitudes, which sums to $R^2 = .118$. This R^2 of .118 is 11.8% of the variation explained. The adjusted R^2 for X_{10} , use of program, yielded an $F = 2.00$, which is not significant at the .05 level. This indicates that the original theoretical model, including 12 independent variables, for use of programs is not adequate and needs to be revised. The revised model for X_{10} , as well as a revised model for X_{11} , cottage behavior, are set forth at the end of the chapter.

The relationship between length of stay and use of the counseling program is interesting. The relationship is in the theoretically expected direction in that boys who are in the school longer may develop more positive relationships with the counseling staff and therefore more readily involve themselves in the counseling program. Also, it may well be that boys must be in the discussion groups for some minimum period of time before they can feel comfortable enough to begin to actively involve themselves in the discussion sessions. Although not shown in the diagram in

Figure 3, there was a path coefficient of .257 between length of stay and amount of talking in the discussion group. The amount of talking in the group was a questionnaire item answered by the group discussion leaders as one indicator of use of program. This path coefficient, significant at the .001 level of significance, from length of stay to amount of talking in the discussion group supports the notion that a longer stay may be conducive to becoming more involved in the counseling sessions.

In sum, the three in-training school variables that are statistically related to use of the counseling program are clique attitudes, individuals' attitudes about receiving help at the school and length of stay.

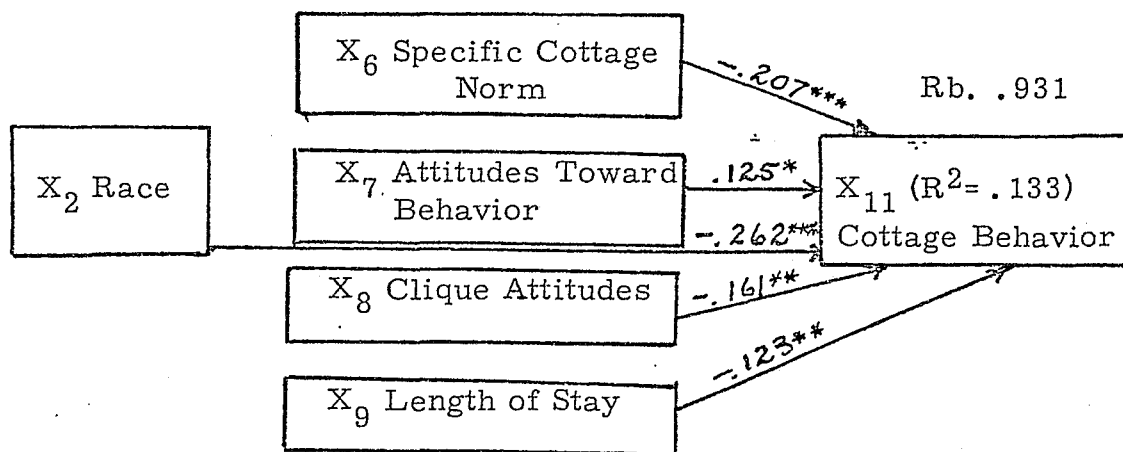
In terms of the original theoretical model relating pre and in-training school variables to adjustment in school, it seems clear that some of the in-training school variables are directly related to use of the counseling program, but the pre-training school variables are not directly related to this dependent variable. There are no statistically significant relationships between pre-training school variables and use of the counseling program. That is, neither delinquency involvement, pre-training school expectations nor race are directly related to use of the program.

Cottage Behavior--Direct Effects

To analyze the direct effects of pre-training school variables

and in-training school variables upon the dependent variable, cottage behavior; an analysis and interpretation of the following path diagram is presented.

Figure 4. Path Diagram for Cottage Behavior



* Significant at the .05 level

** Significant at the .01 level

*** Significant at the .001 level

In-training School Variables. As illustrated in the path diagram of Figure 4, specific cottage norm (X₆), attitudes toward behavior (X₇), clique attitudes (X₈), and length of stay (X₉) are all statistically related to cottage behavior (X₁₁). The largest of the four path coefficients is that between X₆ and X₁₁; namely, $-.207$. However, this relationship is not in the theoretically expected direction. That is, the more the boys perceive the cottage norm as pro-social (not to fight nor be tough), the less pro-social is their cottage behavior. The positive relationship between attitudes toward behavior (X₇) and cottage behavior (X₁₁) suggests that boys with

more pro-social attitudes toward the staff, rules and school behavior in a more pro-social manner in the cottage, which is to be expected. The negative relationship between length of stay (X_9) and cottage behavior (X_{11}) is not in the theoretically predicted direction. The variances in X_{11} explained by the five independent variables of the diagram are as follows: Race (5.8%), Specific Cottage Norm (.5%), Attitude Toward Behavior (2.6%), Clique Attitudes (3.3%), and Length of Stay (1.1%). The R^2 for these five variables is .133, which is 13.3% of the variation explained. The adjusted R^2 for X_{11} , cottage behavior, yielded an $F=1.66$, which is not significant at the .05 level. In sum, there are four in-training school variables related directly to cottage behavior, X_{11} , but only attitudes toward behavior, X_7 , is related in the theoretically predicted direction.

Pre-training School Variables. As noted in the path diagram in Figure 4, on cottage behavior, the only pre-training school variable directly related to cottage behavior (X_{11}) is race (X_2). This relationship of $-.262$ is significant at the .001 level of significance and is in the direction predicted by the theoretical model, i.e. with Whites behaving in a more pro-social manner in the cottage. The axiomatic reasoning for the model was that Blacks, having been exposed to prejudicial treatment (for example, by the police, prior to their arrival at school) and likely more often from the

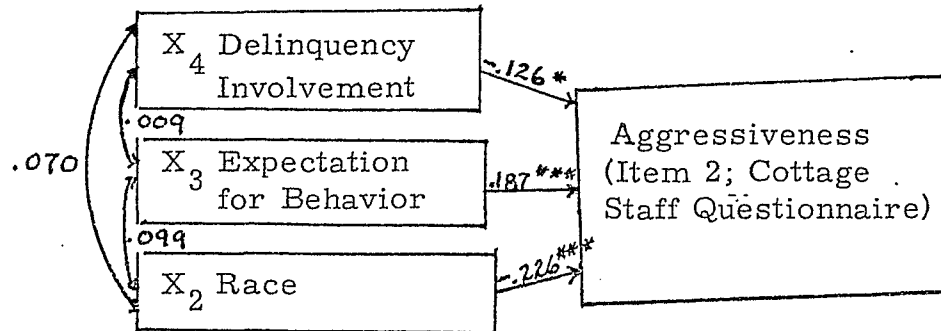
lower class, enter the school with more negative attitudes toward the school. These negative attitudes in turn are manifested in weak relationships with staff and more anti-social behavior in the cottage. However, there are not statistically significant relationships between race and two of the three pre-training school attitudes (X_3 and X_{12}). The zero order partial correlation coefficient between race and X_3 (expectations for behavior) was .099, while that between race and X_{12} (expectations of involvement) was -.013. Therefore, one cannot conclude that Black youth enter the training school with more negative attitudes, which does not support the theoretical reasoning of the model.

It should be noted that there were not statistically significant relationships between delinquency involvement and cottage behavior, nor between pre-training school expectations (X_1 , X_3 and X_{12}) and cottage behavior.

To examine more specifically the relationship of pre-training school variables to one aspect of the boys' cottage behavior, use is made of one more path diagram. This diagram, Figure 5, shows the path coefficients from three pre-training school variables to aggressiveness. Aggressiveness is measured by one cottage staff questionnaire item, which was previously included in the overall scale measuring cottage behavior (X_{11}). Aggressiveness was scored such that negative values indicated greater aggressiveness;

for example, "very aggressive" equals a score of -3 and "not at all aggressive" equals a score of 0.

Figure 5. Path Diagram for Aggressiveness



- * Significant at the .05 level
- ** Significant at the .01 level
- *** Significant at the .001 level

The above three path coefficients represent direct effects from three pre-training school variables to one aspect of cottage behavior, aggressiveness. All three relationships are statistically significant. Also, as set forth in the original theoretical model in Chapter II, all three relationships are in the theoretically expected direction. The greater the delinquency involvement, measured by number of court appearances, the greater the boys' aggressiveness in the cottage. The more pro-social the boys' pre-training school expectations for behavior, the lesser their aggressiveness in the cottage and Blacks tend to be more aggressive in their cottage behavior. It seems theoretically logical that Black youth, and greater involvement in delinquency prior to coming to a training

school, might more often be indicative of a working class delinquent subculture that included norms stressing aggressive behavior.

Finally, boys who upon arrival at the school with expectations for pro-social behavior in the school would seem less likely to engage in aggressive behavior at the school.

Interpretation of Data in Terms of Theoretical Model and Related Hypotheses

In the original theoretical model, it was proposed that adjustment in training school, including use of the counseling program, X_{10} and cottage behavior, X_{11} would be influenced by relationships to staff. The relationships to staff in turn would be influenced by both.

1. In-training school variables of cottage norms, attitudes toward staff, programs and rules, as well as clique attitudes and length of stay.

2. Pre-training school variables of delinquency involvement, pre-training school attitudes and race.

From the model, six hypotheses were deduced as follows:

I. In-training School Hypotheses

- a. There will be a positive relationship between pro-social cottage norms and extent of pro-social training school adjustment.
- b. There will be a positive relationship between pro-social

clique attitudes and extent of pro-social training school adjustment.

- c. There will be a positive relationship between students' length of stay and extent of pro-social training school adjustment.

2. Pre-training School Hypotheses

- a. There will be a negative relationship between amount of delinquency involvement and extent of pro-social training school adjustment.
- b. There will be a positive relationship between pro-social pre-training school attitudes, or expectations, and extent of pro-social training school adjustment.
- c. There will be a relationship between race and training school adjustment, with Whites more often making a pro-social adjustment.

Conclusions on Hypotheses---Use of Program. With respect to use of the counseling program (X_{10}), cottage norms are not a significantly related variable. However, clique attitudes are related positively to this use, suggesting the importance of small, intimate primary groups in influencing behavior. Length of stay is related positively to use of the program and in the theoretically expected direction. That is, greater length of stay is associated

positively with more involvement in the group discussion program. This suggests that as boys are there longer, they may develop stronger relationships with the counseling staff and therefore can more readily enter into the group discussions. Length of stay has a greater direct effect upon use of program (.283) than does clique attitudes (.163). There are no pre-training school variables that are statistically related to use of program. Thus, for X_{10} , as one variable of training school adjustment, the hypotheses on cliques and length of stay seem supported by the data, while hypotheses 4-6, on delinquency, pre-training school attitudes and race, are not supported by the data.

Conclusions on Hypotheses---Cottage Behavior. Although specific cottage norm (X_6) and clique attitudes (X_8) are statistically related to cottage behavior (X_4), these relationships are not in the theoretically expected direction. Length of stay (X_9) is negatively related to cottage behavior, and although this was not in the theoretically predicted direction, it is a reasonable finding. Better behavior in the cottage may well lead to earlier release from the school. Thus, hypotheses 1-3, on norms, cliques and length of stay are not supported by the data. Finally, of the pre-training school variables, race (X_5) has a major effect upon cottage behavior (-.262) and in the theoretically expected direction. Also, race, delinquency

involvement (X_1) and expectations for behavior (X_3) are statistically related to one indicator of cottage behavior, aggressiveness, and in a theoretically logical direction. So, hypotheses 4-6, on delinquency involvement, pre-training school attitudes and race seem, to some extent, supported by the data.

In sum, of the variables in the six hypotheses, the in-training school variables of clique attitudes and length of stay are related to use of the counseling program (X_{10}) in the theoretically predicted direction, while the pre-training school variables of race, delinquency involvement and expectations for behavior are related in the theoretically expected direction to cottage behavior (X_{11}) and/or aggressiveness.

It is interesting to speculate about why the in-training school variables are more theoretically and empirically associated with the group counseling program, while the pre-training school variables are more associated with the boys' behavior in the cottage. One possibility is that use of the counseling program and cottage behavior are two rather separate types of behavior. The lack of relationship between these two variables is clearly illustrated by the zero order correlation coefficient of only .004 between X_{10} and X_{11} . It would seem that greater involvement in the group counseling program would be related to more pro-social behavior in the cottage. The zero order correlation of .084 between the use of

the counseling program and rule obeying behavior in the cottage is a somewhat larger correlation, as is the correlation of .074 between use of program and cottage unit adjustment. These last two aspects of cottage behavior, rule obeying behavior and cottage adjustment, are two items of the overall variable, cottage behavior (X_6). The low correlation coefficients of .084 and .074 also support the notion that use of the program and cottage behavior are rather separate aspects of behavior.

Tentative Conclusions of Theoretical Model. The fact that five of the six hypotheses on cottage adjustment were partially supported implies some support for the model. That is, the reasoning on the in-training school influences of cliques and length of stay upon use of the counseling program, via the intervening variable of relationships to staff, seems theoretically logical. Perhaps, greater length of stay encourages stronger relationships with the counseling staff, which in turn is conducive to greater involvement in the group discussion program. Also, perhaps boys are pressured to change their frame of reference to coincide with the expectations of their peers, i. e. the situation, in order to obtain status, as suggested by Cohen (1955). However, the fact that there was not a statistically significant relationship between norms and use of the counseling program is not supportive of the model. It may be simply that the

small, intimate peer group has greater influence upon the boys' use of programs than the larger, 30 member cottage unit. That is, the boys may perceive certain norms in their cottage as either pro-social or anti-social, but decide about whether to become involved in the counseling program more in terms of their own attitudes and the attitudes of their small intimate cliques of friends.

The reasoning on the pre-training school influences of delinquency involvement, race and pre-training school expectations for behavior upon cottage behavior is partially supported by the significant relationships among these variables. That is, perhaps Black youth who have experienced prejudicial treatment, youth who have been labeled delinquent by the police and the courts and boys who enter the school with anti-social expectations for behavior more often have anti-social attitudes while in the school. These anti-social attitudes may result in poor relationships with the cottage staff and therefore more anti-social cottage behavior; for example, aggressiveness. However, as noted previously, the reasoning that Black youth enter the school with more negative attitudes than Whites is not supported by the data.

The findings on training school adjustment can be interpreted within the context of several sociological theories. More specifically, the impact of delinquency involvement and race on cottage behavior, including aggressiveness, may reflect the operation of a

working class delinquent subculture that influences the attitudes and behavior of the boys when they come to a training school. Boys with greater involvement in delinquency may have been involved in a delinquent subculture and internalized the delinquent norms or criteria for status, which are then reflected in their behavior in the cottage. Also, the less pro-social cottage behavior of the Black youth may be a function of the influence of a working class background. The relationship of greater delinquency involvement to more anti-social cottage behavior may be partly a function of the labelling process. This social psychological perspective suggests that the negative reactions of society, including agencies of social control to deviant behavior may be conducive to the development of more deviant self-concepts and attitudes, which may have been manifested in the more anti-social cottage behavior of youths having greater delinquency involvement.

Goffman's (1961) reasoning on the impact of institutionalization seems partly supported by the findings. There is a system of privileges at the training school, in the form of the point system program of rewards for pro-social behavior. However, the educational programs and the cottage program seem geared to meet the specific individual needs and problems, such as poor reading skills, of the boys as opposed to the boys being treated as part of a mass.

Finally, the positive relationship of clique attitudes to use of counseling programs can be interpreted in terms of field theory and cognitive dissonance theory. Cartwright (1968) suggests that attitudes and values are rooted in the group and the more attractive the group is, the more influence it can exert. The small clique of about 3 closest friends may exert more influence upon the boys attitudes; for example, toward staff and use of programs, than the larger cottage group of about 30 members. There was not a significant relationship between cottage norms and use of the counseling program. Finally, the positive relationships of both clique attitudes and individual attitudes to use of programs may reflect the tendency of persons to seek consistency in their cognition, or ideas. The boys may seek to have consistency between their own attitudes toward staff and the attitudes of their peer groups.

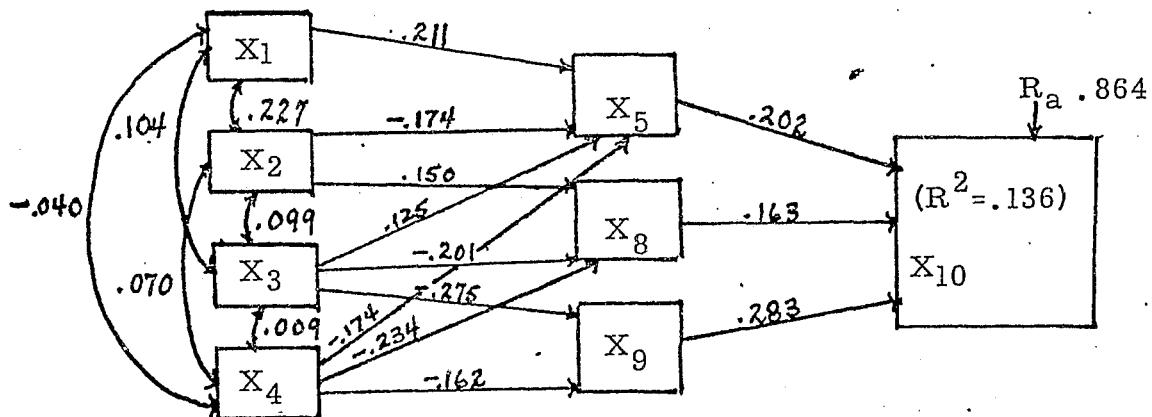
In summary, an analysis of the direct effects of pre-training school and in-training school variables suggests that race, a pre-training school variable, is related to cottage behavior, while length of stay and cliques, in-training school variables, are related to use of the group counseling program. This analysis of direct effects provided tests of the six hypotheses of the study, with five of these six hypotheses partially supported.

To evaluate the goodness of fit of the models, or path diagrams, on use of program and cottage behavior, path estimation equations

are derived from which predicted values for correlations among variables are calculated. These predicted values are compared to the respective values observed in the sample data. The path diagrams for use of program and cottage behavior are presented, followed, respectively by summaries of the predicted and observed values for the use of program model and for the cottage behavior model (Tables 13 and 14). The full estimation equations and calculations of the predicted values for both models are presented in Appendix I.

Use of Counseling Program (Figure 6)

The statistically significant path coefficients for the relationships of the pre-training school variables and use of the counseling program are depicted in the following diagram. All the path coefficients shown are statistically significant at either the .01 or the .001 level of significance.



ZERO-ORDER CORRELATION MATRIX
(Use of Counseling Program)

<u>Variable</u>	<u>X₁</u>	<u>X₂</u>	<u>X₃</u>	<u>X₄</u>	<u>X₅</u>	<u>X₈</u>	<u>X₉</u>	<u>X₁₀</u>
X ₁ Expectation of Help227**	.104	-.040	.190**	-.008	-.007	.106
X ₂ Race	099	.070	-.133*	.102	-.079	-.010
X ₃ Expectation for Behavior		009	.113	-.214**	-.266**	.053
X ₄ Delinquency Involvement				...	-.203**	-.240**	-.191**	-.086
X ₅ Attitudes Toward Help					...	-.212**	.076	.169*
X ₈ Clique Attitudes					164*	.121*
X ₉ Length of Stay						282**
X ₁₀ Use of Program								...

* = Significant at .05 level ** = Significant at .01 level

Figure 6. Path diagram showing influence of pre-training and in-training school variables on use of program. The equations for Figure 5 resemble the following:

$$X_5 = P_{51} X_1 + P_{52} X_2 + P_{53} X_3 + P_{54} X_4 + P_5 U \text{ (Unmeasured Variables)}$$

$$X_8 = P_{82} X_2 + P_{83} X_3 + P_{84} X_4 + P_8 U \text{ (Unmeasured Variables)}$$

$$X_9 = P_{93} X_3 + P_{94} X_4 + P_9 U \text{ (Unmeasured Variables)}$$

$$X_{10} = P_{105} X_5 + P_{108} X_8 + P_{109} X_9 + P_a R_a$$

TABLE XIII

Predicted and Observed Values for Path Model on Use of Program

<u>Correlations</u>	<u>Path Equations</u>	<u>Predicted Values</u>	<u>Observed Values</u>
Attitudes Toward Help(X_5)			
$r_{51} = P_{51} + P_{52} r_{21} + P_{53} r_{31} + P_{54} r_{41}$		.191	.190
$r_{52} = P_{52} + P_{51} r_{12} + P_{53} r_{32} + P_{54} r_{42}$		-.125	-.133
$r_{53} = P_{53} + P_{51} r_{13} + P_{52} r_{23} + P_{54} r_{43}$		.132	.113
$r_{54} = P_{54} + P_{51} r_{14} + P_{52} r_{24} + P_{53} r_{34}$		-.193	-.203

TABLE XIII (cont.)

<u>Correlations</u>	<u>Path Equations</u>	<u>Predicted Values</u>	<u>Observed Values</u>
<u>Clique Attitudes (X₈)</u>			
	$r_{81} = P_{82} r_{21} + P_{83} r_{31} + P_{84} r_{41}$	.023	-.008
	$r_{82} = P_{82} + P_{83} r_{32} + P_{84} r_{42}$	.114	.102
	$r_{83} = P_{83} + P_{82} r_{23} + P_{84} r_{43}$	-.118	-.214
	$r_{84} = P_{84} + P_{82} r_{24} + P_{83} r_{34}$	-.220	-.240
<u>Length of Stay (X₉)</u>			
	$r_{91} = P_{93} r_{31} + P_{94} r_{41}$	-.023	-.007
	$r_{92} = P_{93} r_{32} + P_{94} r_{42}$	-.039	-.079
	$r_{93} = P_{93} + P_{94} r_{43}$	-.276	-.266
	$r_{94} = P_{94} + P_{93} r_{34}$	-.164	-.191
<u>Use of Program (X₁₀) and Expectation of Help (X₁)</u>			
	$r_{101} = P_{105} r_{51} + P_{108} r_{81} + P_{109} r_{91}$	.037	.106

TABLE XIII (cont.)

<u>Correlations</u>	<u>Path Equations</u>	<u>Predicted Values</u>	<u>Observed Values</u>
<u>Use of Program (X₁₀) and Race (X₂)</u>			
	$r_{102} = P_{105} r_{52} + P_{108} r_{82} + P_{109} r_{92}$	-.025	-.010
<u>Use of Program (X₁₀) and Expectation for Behavior (X₃)</u>			
	$r_{103} = P_{105} r_{53} + P_{108} r_{83} + P_{109} r_{93}$	-.082	.053
<u>Use of Program (X₁₀) and Delinquency Involvement (X₄)</u>			
	$r_{104} = P_{105} r_{54} + P_{108} r_{84} + P_{109} r_{94}$	-.121	-.085

Observation of the table suggests a very close fit of the model on use of programs. That is, the predicted values for the three endogenous, in-training school variables (X_5 , X_8 and X_9), as predicted from the path equations derived from the path diagram, are very close to the observed correlations. For example the largest discrepancy is that between the predicted value for r_{83} of $-.118$ and the observed value of $-.214$ and the difference is only $.096$. The predicted and observed values for the three endogenous variables tend to be closer than for the dependent variable, X_{10} , as predicted from the four exogeneous variables. It should also be noted that the direction for each predicted relationship, as indicated by the signs, is the same, in all but two cases, as the direction for each observed relationship. In sum, it appears that the path model is a fairly strong one in terms of its fit to the observed correlations.

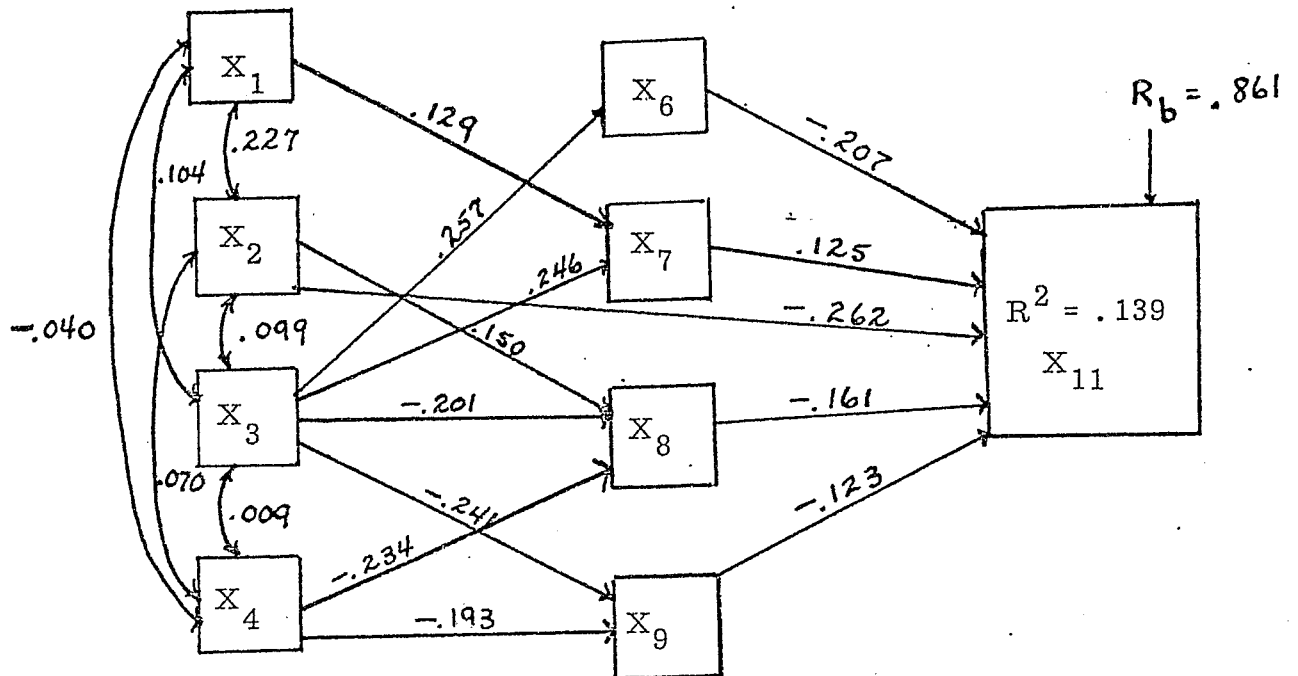
There are indirect effects of the pre-training school variables upon the dependent variable (X_{10}), as mediated by the in-training school variables. As there are no direct effects from the pre-training school variables to X_{10} , the total effects, or correlations, of r_{101} , r_{102} , r_{103} and r_{104} , are all indirect effects (Indirect Effects = Total Effects - Direct Effects; $TIE = r_{ij} - P_{ij}$). As observed in the path diagram, on page 119, the indirect effect of Expectation of Help (X_1) upon X_{10} is mediated by the Attitudes Toward Help (X_5) such that boys entering the school with pro-social

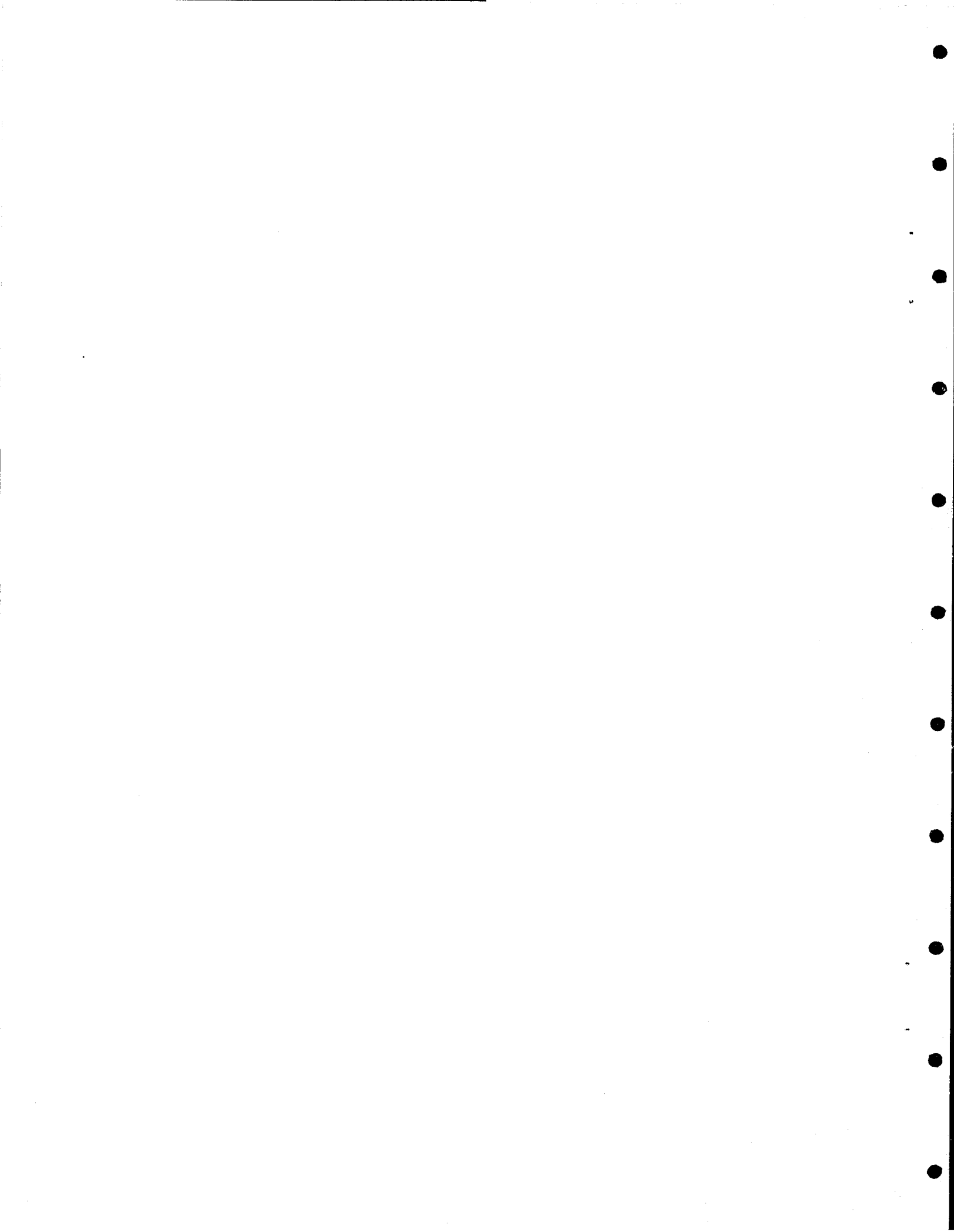
expectations have positive attitudes in school which are manifested in greater use of the counseling program. Also, the indirect effect of race upon X_{10} is mediated by the in-training school variables of attitudes Toward Help (X_5) and Clique Attitudes (X_8) and mainly by X_5 ($P_{105} P_{52} = -.035$). Blacks tend to have anti-social attitudes toward whether they are receiving help, while in the training school. However, Blacks tend to have pro-social Expectations for Help (X_1), upon arrival at the school ($r_{12} = .227$). This indirect effect from Race to X_{10} , via X_1 and X_5 is positive ($P_{105} P_{51} r_{12} = .010$) and partly offsets the negative path from X_2 to X_{10} , via X_5 . Finally, the indirect effect of Delinquency Involvement (X_4) is mediated by all three in-training school variables (X_5 , X_8 and X_9). More specifically, the main portion of the indirect effect is via X_5 ($P_{105} P_{54} = -.035$), X_8 ($P_{108} P_{84} = -.036$) and X_9 ($P_{109} P_{94} = -.046$). Overall, greater delinquency involvement is conducive to less use of the counseling program, as mediated by the three in-training school variables.

Cottage Behavior

The statistically significant path coefficients for the relationships of the pre-training school variables, in-training school variables and cottage behavior are depicted in the diagram on the following page. (Figure 7. Path diagram on Cottage Behavior).

Figure 7. (Path Diagram for Cottage Behavior)





ZERO-ORDER CORRELATION MATRIX
(For Cottage Behavior)

Variable	<u>X₁</u>	<u>X₂</u>	<u>X₃</u>	<u>X₄</u>	<u>X₆</u>	<u>X₇</u>	<u>X₈</u>	<u>X₉</u>	<u>X₁₁</u>
X ₁ Expectation of Help227**	.104	-.040	.048	.130	-.008	-.007	.056
X ₂ Race	099	.070	-.091	-.069	.102	-.079	-.245**
X ₃ Expectation of Behavior		009	.252**	.244**	-.214**	-.266**	.117
X ₄ Delinquency Involvement				...	-.117	-.078	-.240**	-.191**	-.084
X ₆ Specific Cottage Norm				272**	-.107	-.047	-.046
X ₇ Attitudes Toward Behavior						...	-.060	-.040	.140
X ₈ Clique Attitudes						164	-.187**
X ₉ Length of Stay								...	-.140
X ₁₁ Cottage Behavior									...

* = Significant at .05 level

** = Significant at .01 level

Figure 7. Path Diagram for Cottage Behavior. The equations for Figure 7 resemble the following:

$$X_6 = P_{63} X_3 + P_6 U \text{ (Unmeasured Variables)}$$

$$X_7 = P_{71} X_1 + P_{73} X_3 + P_7 U \text{ (Unmeasured Variables)}$$

$$X_8 = P_{82} X_2 + P_{83} X_3 + P_{84} X_4 + P_8 U \text{ (Unmeasured Variables)}$$

$$X_9 = P_{93} X_3 + P_{94} X_4 + P_9 U \text{ (Unmeasured Variables)}$$

$$X_{11} = P_{116} X_6 + P_{117} X_7 + P_{118} X_8 + P_{119} X_9 + P_{112} X_2 + P_b R_b$$

TABLE XIV

Predicted and Observed Values for Path Model on Cottage Behavior

<u>Correlations</u>	<u>Path Equations</u>	<u>Predicted Values</u>	<u>Observed Values</u>
Specific Cottage Norm (X_6)			
r_{61}	$= P_{63} r_{31}$	.018	.048
r_{62}	$= P_{63} r_{32}$	.025	-.091
r_{63}	$= P_{63}$	.257	.252
r_{64}	$= P_{63} r_{34}$	.002	-.117

TABLE XIV (Cont)

<u>Correlations</u>	<u>Path Equations</u>	<u>Predicted Values</u>	<u>Observed Values</u>
<u>Attitudes Toward Behavior (X₇)</u>			
r ₇₁	= P ₇₁ + P ₇₃ r ₃₁	.155	.130
r ₇₂	= P ₇₁ r ₁₂ + P ₇₃ r ₃₂	.060	-.069
r ₇₃	= P ₇₃ + P ₇₁ r ₁₃	.259	.244
r ₇₄	= P ₇₁ r ₁₄ + P ₇₃ r ₃₄	-.003	-.078
<u>Clique Attitudes (X₈)</u>			
r ₈₁	= P ₈₂ r ₂₁ + P ₈₃ r ₃₁ + P ₈₄ r ₄₁	.022	-.008
r ₈₂	= P ₈₂ + P ₈₃ r ₃₂ + P ₈₄ r ₄₂	.114	.102
r ₈₃	= P ₈₃ + P ₈₂ r ₂₃ + P ₈₄ r ₄₃	-.118	-.214
r ₈₄	= P ₈₄ + P ₈₂ r ₂₄ + P ₈₃ r ₃₄	-.225	-.240

TABLE XIV (cont.)

<u>Correlations</u>	<u>Path Equations</u>	<u>Predicted Values</u>	<u>Observed Values</u>
<u>Length of Stay (X₉)</u>			
r ₉₁	= P ₉₃ r ₃₁ + P ₉₄ r ₄₁	-.017	-.007
r ₉₂	= P ₉₃ r ₃₂ + P ₉₄ r ₄₂	-.038	-.079
r ₉₃	= P ₉₃ + P ₉₄ r ₄₃	-.243	-.266
r ₉₄	= P ₉₄ + P ₉₃ r ₃₄	-.195	-.191
<u>Cottage Behavior (X₁₁) and Expectation of Help (X₁)</u>			
r ₁₁₁	= P ₁₁₆ r ₆₁ + P ₁₁₇ r ₇₁ + P ₁₁₈ r ₈₁ + P ₁₁₉ r ₉₁	.011	.056
<u>Cottage Behavior (X₁₁) and Race (X₂)</u>			
r ₁₁₂	= P ₁₁₆ r ₆₂ + P ₁₁₇ r ₇₂ + P ₁₁₈ r ₈₂ + P ₁₁₉ r ₉₂	-.273	-.245

TABLE XIV

<u>Correlations</u>	<u>Path Equations</u>	<u>Predicted Values</u>	<u>Observed Values</u>
<u>Cottage Behavior (X_{11}) and Expectation for Behavior (X_3)</u>			
r_{113}	$= P_{116} r_{63} + P_{117} r_{73} + P_{118} r_{83} + P_{119} r_3$	.040	.116
<u>Cottage Behavior (X_{11}) and Delinquency (X_4)</u>			
r_{114}	$= P_{116} r_{64} + P_{117} r_{74} + P_{118} r_{84} + P_{119} r_{94}$	-.017	-.083

Observation of Table 14 suggests a rather close fit between the values predicted by equations drawn from the model and the observed values. The endogenous variables of Length of Stay (X_9), Clique Attitudes (X_8) and Attitudes Toward Behavior (X_7) are predicted quite well from the four exogenous variables in terms of numerical values and direction of relationships. One exception is r_{72} , the correlation between race and attitudes toward behavior. However, the numerical discrepancy is only .129, i. e. between .060, predicted and -.069, observed. Specific Cottage Norm (X_6) is not predicted too well from X_2 (Race) nor from X_4 (Delinquency Involvement), but again the numerical discrepancies are quite small. The dependent variable of Cottage Behavior (X_{11}) is also predicted quite well from the exogenous, pre-training school variables of X_1 , X_2 , X_3 and X_4 in terms of numerical values and direction of relationships. So, overall the model, or path diagram, as depicted seems a plausible ordering of relationships with respect to cottage behavior.

Also, there are some small indirect effects of the pre-training school variables upon cottage behavior, as mediated by the in-training school variables. However, it should be noted that the major portion of the predicted correlation between race and X_{11} ($r_{112} = -.273$) is from its direct effect upon this dependent variable ($P_{112} = -.262$). Thus, it seems that pre-training school

variables exert some influence upon cottage behavior, via the in-training school variables. For example, the indirect effects from X_3 to X_{11} are positive as mediated by X_7 (Attitudes Toward Behavior), X_8 (Clique Attitudes) and X_9 (Length of Stay). The path from X_3 to X_{11} via X_7 is logical and in line with the theoretical model. That is, boys who, upon arrival at the training school, expect to behave in a pro-social way at the school would likely have pro-social attitudes about how they should behave at the school ($P_{73} = .246$), which in turn is manifested in obedient behavior in the cottage ($P_{117} = .125$). The path from X_3 to X_{11} via X_9 is also theoretically logical. Boys having pro-social expectations for behavior would likely have shorter lengths of stay ($P_{93} = -.241$) and shorter lengths of stay would be associated with more pro-social behavior in the cottage ($P_{119} = -.123$).

In summary, the revised models on X_{10} and X_{11} seem acceptable models as indicated by the comparisons of the correlation values predicted by path estimation equations derived from the models and the observed values for these correlations. Also, there are indirect effects of pre-training school variables upon both use of the counseling program and cottage behavior, mediated by the in-training school variables. In an attempt to extend upon the preceeding analysis and interpretation of the various path diagrams, new theoretical models are proposed by which to explain the adjust-

ment of boys in training schools. These revised models, derived mainly from the data and theoretical reasoning in the present study, might serve to guide future research on the adjustment of boys in training schools. However, in the new theoretical models proposed a few variables are added that were not specifically analyzed in the study; for example, social class, family structure and contact with family. Post-training school behavior is added to the model in that this might serve as a criterion variable by which the effectiveness of the treatment programs might be evaluated.

Proposed Models--For Future Research on Training School Adjustment

The following three propositions express the basic theoretical relationships of the models proposed for future research on pre and in-training school variables, and post-training school behavior. The propositions are:

1. Post-training school behavior, in terms of further involvement in delinquency, is influenced by the adjustment at the training school which, in turn is influenced by both in-training school and pre-training school variables. Although not in the original model, this would be a way to evaluate the effectiveness of the school programs in rehabilitation of the youth.
2. Adjustment in training school, including the use of the

group counseling program and cottage behavior, is influenced by several in-training school variables:

- a. Attitudes toward how to behave at the school and attitudes toward receiving help at the school.

These two variables were shown in the present study to be significantly and positively related to cottage behavior and use of counseling programs, respectively.

- b. Relationships to staff; from strong, positive types of relationships to weak, negative (for example, hostile) types of relationships to staff.

- c. Contact of the boys with family, while in the training school. This was considered by the author as a possibly important variable for the present study, but was not measured because in the pre-test of the questionnaire many of the boys being interviewed were greatly offended by being asked about the number of visits and letters they received from family members while at the school. The fact that they were greatly offended by the questions suggests that it was a psychologically important point to them and therefore possibly an important variable to consider in the adjustment of boys in a training

school. Obviously, a way to suitably operationalize the concept of family contact would have to be found. Likely, greater family contact would be associated with more pro-social training school adjustment.

3. Adjustment in training school is influenced by several pre-training school variables:

a. Social class of parents

This was also considered as a possibly important variable, but was not measured because the occupations of the heads of household for the 150 boys in the sample were only indicated in the training school records for 88 of the boys. However, if a way could be found to obtain complete data on occupation, as an indicator of class, it may be an important variable. The theories of Miller (1958) and Cohen (1955) stress the importance of the lower and working class sub-cultures as conditions conducive to delinquency. For example, of the 88 boys for whom records on occupation could be obtained, almost all of the boys were from the lower and working class. The social class norms and values of the boys may influence their adjust-

ment in the school.

b. Delinquency involvement

As suggested in the present study, this is an important variable influencing training school adjustment, particularly aggressive cottage behavior.

c. Race

The importance of this variable in influencing training school adjustment, particularly cottage behavior, was shown in the present study.

d. Expectations for behavior and for help

These two variables were shown to be important pre-training school variables influencing, respectively, cottage behavior and use of group counseling programs. That is, expectations of behaving well in the school and of likely receiving help at the school in 'straightening out' were related positively to adjustment, via attitudes toward behavior and help, respectively.

e. Family structure

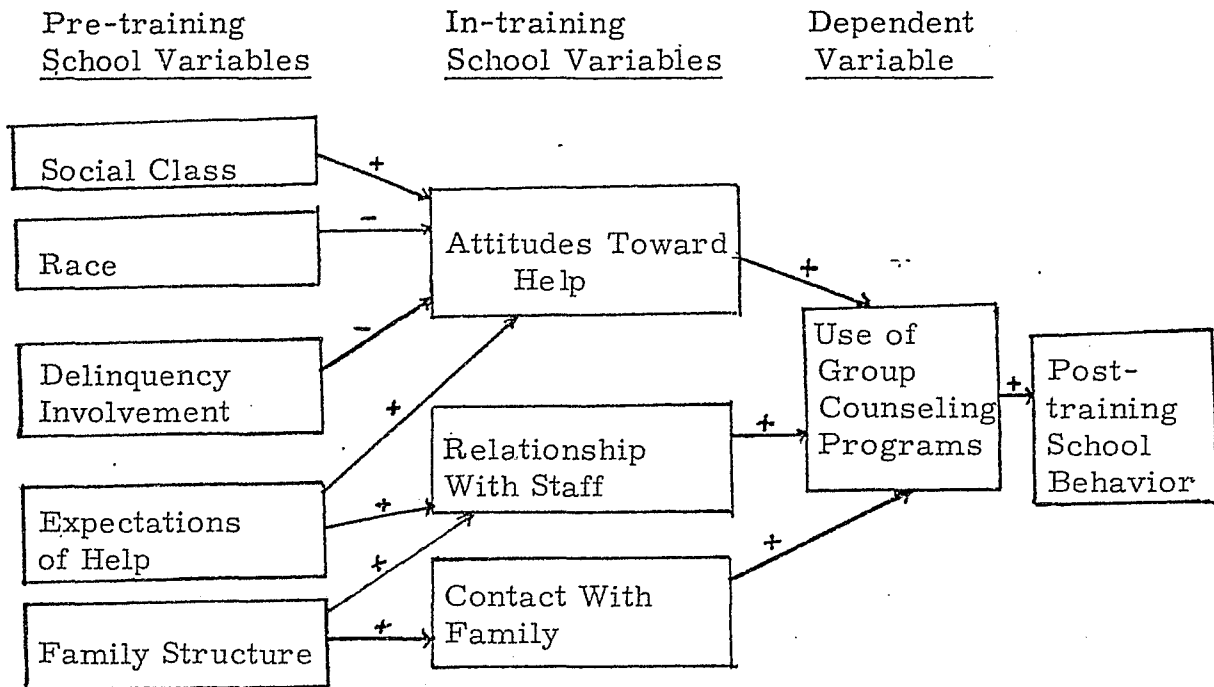
Although not analyzed in the present study; family structure, meaning the strength of the relation-

ships of the training school boys' families, might well be a pre-training school variable influencing the boys' adjustment in the school. For example, stronger ties between the boys and their families in their homes prior to the youth coming to the school, would likely be related to more contact between the families and the boys while they are in the school. The strength of family relationships can vary some as indicated by the characterizations of the boys' families, outlined in Figure 1, Chapter IV. This figure described the family relationships of the boys as ranging from somewhat strong, warm relationships between boys and their parents to quite weak and rejecting types of relationships.

Finally, length of stay would be included in the model as a control variable. As will be recalled, length of stay was shown to be quite strongly related to both use of program and to cottage behavior. The reason this would be included as a control variable is that it would be interesting to analyze the relationships of the in-training school and pre-training school variables to adjustment in school, by phases of the boys' stay. Wheeler (1961) found a relationship between length of stay and attitudes of adult prisoners

that changed, according to the phase of their stay in prison. During the first phase of their stay they had pro-social attitudes whereas during their second phase they grew more anti-social. Finally, as they approached release their attitudes were more often pro-social. Obviously, use of length of stay in this manner would require obtaining measures of the in-training school variables and the dependent variables, use of program and cottage behavior, at three different points in time. The nature of the proposed theoretical models is depicted in the following two figures, on use of program and cottage behavior. These two figures, number 8 and number 9, are on the following two pages respectively.

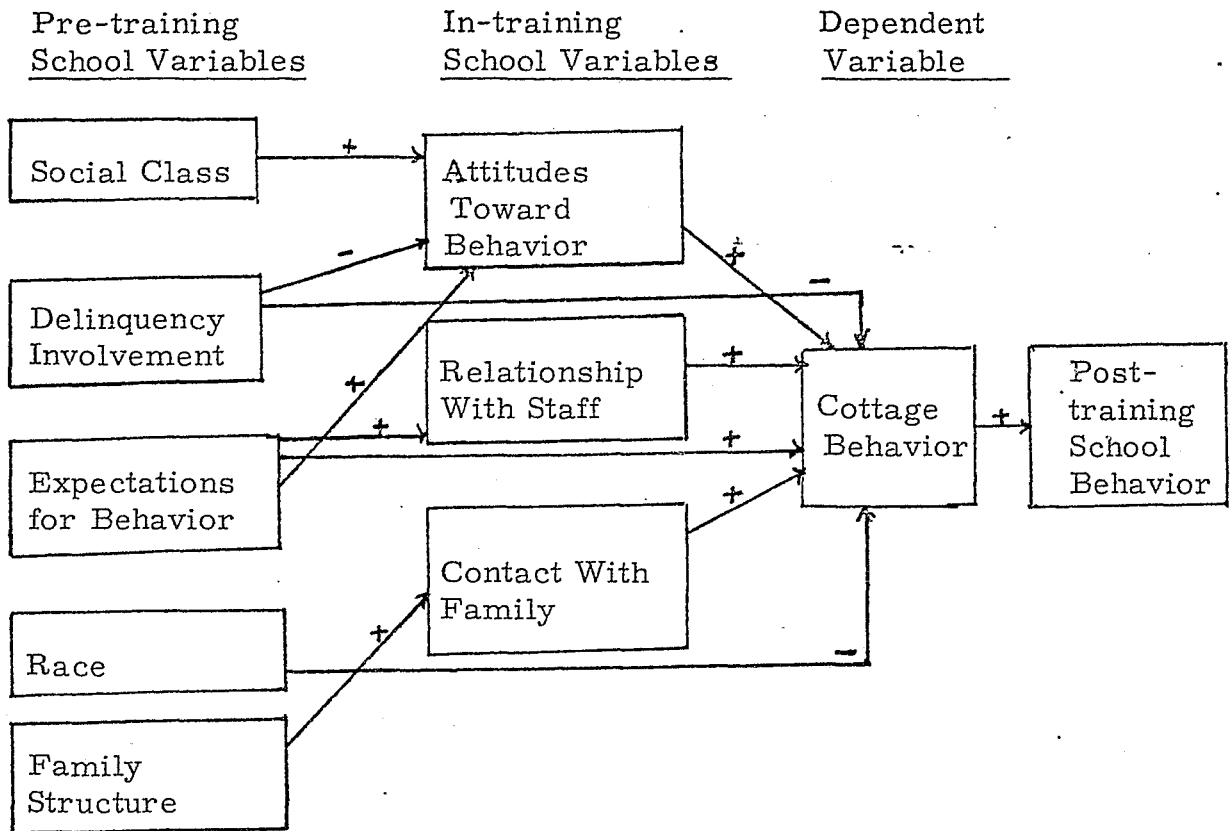
Figure 8. Pre-training School Variables, In-training Variables, Use of Programs and Post-training School Behavior*



* Length of stay, by phases, would also be considered for its impact upon in-training school variables and upon use of programs.

The nature of the relationships with respect to cottage behavior is depicted in the following theoretical model, on the next page.

Figure 9. Pre-training School Variables, In-training Variables, Cottage Behavior and Post-training School Behavior*



* Length of stay, by phases, would also be considered for its impact upon the in-training school variables and upon cottage behavior.

A study of training school adjustment, including use of programs and cottage behavior, using the above theoretical reasoning and models might extend upon the results of the present study. The use of a measure of post-training school behavior would help the school staff to evaluate the effectiveness of their programs. This type of

analysis of the combined effects upon adjustment in training school of both pre and in-training school influences is analogous to the work of recent studies on adult prisoners. However, little use has been made of path analysis to analyze the results of studies of prisons, nor in the studies of the adjustment of training school boys. Yet, it seems that the study of the sequentially ordered pre and in-training school variables and the dependent variables lends itself well to the use of path analysis. Finally, the results of the present study suggest that the adjustment of training school boys is, in general, best explained by a combination of both in and pre-training school variables.

CHAPTER VI

SUMMARY AND IMPLICATIONS

The format of this chapter is to present a summary of the study, the theoretical and applied implications of the findings, a discussion of the major theoretical and methodological problems of the study and finally, several suggestions for future research studies on the adjustment of training school boys.

Summary of Study

The adjustment of training school youth was analyzed in terms of their use of the group counseling program and their cottage behavior. A sample of 150 training school boys was used and data was collected by a staff of 11 college students who interviewed the training school boys and examined the boys' records kept at the training school. Also, the training school staff completed questionnaires, from which scores were obtained by which to measure the two dependent variables of the study. An analysis of the data describing the training school revealed that the boys evaluate the treatment programs of the school rather favorably. This analysis also described the nature of the cottage social system, in terms of

its type of leadership, cottage norms and group membership. One interesting finding was that the criteria for cottage leadership were almost as often pro-social; for example, honest, as they were anti-social; for example, being 'slick'. A second interesting finding was the apparent lack of association between type of leadership in a cottage and the type of cottage norms, pro or anti-social.

From a review of the literature, a set of propositions were set forth from which six hypotheses were derived on the relationships of in-training school and pre-training school variables to training school adjustment. A path analysis of the direct effects of the independent variables upon the dependent variables revealed that the pre-training school variables, most particularly race, were more helpful in explaining cottage behavior whereas the in-training school variables, except for cottage norms, were more helpful in explaining use of the counseling program. Therefore, it was tentatively concluded that five of the six hypotheses on training school adjustment were, at least partially, supported by the data. That is, all three hypotheses on pre-training school variables and training school adjustment were partially supported by the data with respect to some cottage behavior aspects of adjustment and two of the three hypotheses on in-training school variables and adjustment were supported by the data with respect to the use of program aspect of adjustment. Also, a test of the goodness of fit of the use of program

model and the cottage behavior model, via predicted and observed values, suggested that the two models are fairly reasonable representations of the relevant variables. An analysis of indirect effects, via path analysis, revealed some theoretically meaningful and statistically significant relationships of several pre-training school variables to the dependent variables, as mediated by some of the in-training school variables.

Finally, two theoretical models were proposed for future research on use of counseling programs and on cottage behavior. These models were, in part, developed from the findings and variables of the present study and represent middle range theories, for example, as stressed by Merton (1957: 40-70).

Implications of the Findings

The main theoretical implication is that the adjustment of training school boys seems better explained by the combination of pre and in-training school variables than by just one set of these variables. That is, some pre-training school variables are directly related to aspects of cottage behavior and some in-training school variables are related to use of the counseling program and to cottage behavior. Also, there are some indirect effects of pre-training school variables upon both cottage behavior and use of the group counseling program, as mediated by some of the in-training school variables. An example of these indirect effects is the effect

of delinquency involvement upon use of the counseling program as mediated by the three in-training school variables of attitudes toward help, clique attitudes and length of stay. So, in terms of the theoretical question of the study concerning the relative influence of pre and in-training school variables, the conclusion by the author is that neither set of variables is clearly more influential than the other in explaining the adjustment of training school boys. This conclusion with respect to adjustment is consistent with findings of recent studies of prisons. That is, the adjustment of inmates in prisons has been found to be related to in-prison and pre-prison variables; respectively, the deprivation and importation models of inmate adjustment.

A second theoretical implication of the findings is that there does not seem to be a strong inmate social system in the training school that is in general opposition to the staff. For example, it was found that the boys' perceptions of the norms, in some of the cottages, were relatively pro-social, as were the criteria for leadership noted by many of the boys. The finding of a lack of a totally anti-administration inmate social system is consistent with other studies of training schools; for example, by Street, Vinter and Perrow (1966).

Two practical implications of the findings of the study are that cliques within the cottages seem influential upon the boys' use of the

group counseling program and the boys' expectations for help and for behavior, upon arrival at the school, are influential upon both their use of the program and their behavior in the cottage. It may be helpful for the staff to make use of the small cliques, via peer group pressure, to encourage greater involvement of the counseling program. Also, it may be advantageous to have a session for the boys, upon their arrival at the school, to encourage pro-social attitudes toward use of the counseling program and toward behavior while at the school.

Theoretical and Methodological Problems of the Study

The main theoretical problem of the study was the failure to include in the theoretical model the concepts of the boys' social class and the extent of their contact with family, while in the training school. As noted previously, not including these concepts was caused by the inability to obtain the data with which to measure social class and family contact. That is, it was discovered during pre-test that the training school students did not know and/or did not understand a questionnaire item on occupation. During the data collection on the sample used for the study the school's records contained the occupations on the heads of household for only 88 of the 150 boys in the sample. It was also discovered during the pre-test that questions about visits and letters from family, to measure

the concept of contact with family, were so offensive to the boys that use of these questions on the study sample might cause many of them to not answer the other questionnaire items.

Another theoretical problem encountered was the lack of any previous theoretical framework for the study of pre and in-training school influence upon the adjustment of training school boys. On the level of inmate adjustment in prisons, there exists the long established deprivation or functional model of prisoner adjustment and the more recently developed importation model. However, it is hoped that the theoretical model as revised by the findings of the present study, might serve as a useful guide to research on the adjustment of training school youth.

Suggestions for Future Research

One possible suggestion would be a replication of the present study, using the theoretical model proposed at the end of Chapter V, which incorporated, mainly, variables used in this study. A second possible research project might be to examine the impact of cottage norms upon the behavior of training school students, using a structural effects approach or a contextual analysis framework (for example; as set forth by Blau, 1960; Campbell and Alexander, 1965; Meyer, 1970; Nelson, 1972 and others). It might be interesting to examine the effects of groups; for example, cottage

units, on the behavior of boys in a training school, holding constant attributes of the individual boys. Finally, a third possibility would be to use Sutherland's differential association theory as a model within which to examine the influence of cliques upon the boys' behavior in training schools. The effects of the cliques upon pro and anti-social training school behavior could be examined as this is influenced by the definitions of the school's rules as favorable or unfavorable (Cressey, 1960). Studies of cottage norms and cliques might add to our knowledge of the cottage social systems and its impact upon the behavior of training school boys.

Appendix A

Preliminary Questionnaire: For Staff of the Training School

This is a brief, four item questionnaire in connection with a research study for my dissertation at the University of Maryland. The study I am doing is to complete my work for the doctorate degree in Sociology. Also, the results of the study may be helpful to you in your work. Please answer the questions to the best of your knowledge. Your responses will be kept confidential and you are not required to give your name.

1. Do you think there is peer group pressure, either positive or negative, upon the boys in the cottages to behave in certain ways?
 Yes _____ No _____ Partly _____ Don't know or unsure _____.

If answer is 'yes' or 'partly', go on to question two.

2. Do you think that the kinds of behavior expected by the peer groups of some cottages might be different from the kinds of behavior expected by the peer groups of other cottages?

(For example, might the peer groups in some cottages expect the residents to behave in somewhat delinquent ways, while the peer groups in other cottages expect the residents to behave in more non-delinquent ways?).

Yes _____ No _____ Partly _____ Don't know or unsure _____

If answer is 'yes' or 'partly', go on to questions three and four.

3. Do you think that the peer group pressure might influence how much a resident accepts the programs of the school?

(For example, might a boy in a cottage with peer group pressure to behave in delinquent ways be somewhat influenced to not try hard in school and to not cooperate with his counselor?)

Yes _____ No _____ Partly _____ Don't know or unsure _____

4. Do you think that the peer group pressure might influence how a resident behaves here at the school?

(For example, might a boy in a cottage with peer group pressure to behave in non-delinquent ways be somewhat influenced to obey the rules of the school?)

Yes _____ No _____ Partly _____ Don't know or unsure _____

Appendix B

OPINION SURVEY

This questionnaire is for a study by the researcher for his degree at the University of Maryland. Your answers will not be seen by any of the staff here at the school or by anyone else but the researcher. You do not even put your name on the questionnaire.

There are no right or wrong answers. It is only how you feel about the questions that is important.

Please be sure to answer every question. Your answers are the most important part of the study, so please give your honest opinions.

I. I would like your opinions about some things in your cottage. Now think of the other boys in your cottage as you answer these questions.

1. Most of the other boys in this cottage feel you should be ready to fight other guys at most any time.

Yes _____ Don't know _____ No _____

2. Most of the other boys in this cottage feel you should try to straighten out and make the best of your stay at this training school.

Yes _____ Don't know _____ No _____

3. Most of the other boys in this cottage feel you should obey the rules of this institution.

Yes _____ Don't know _____ No _____

4. Most of the other boys in this cottage feel you should have nothing to do with the staff.

Yes _____ Don't know _____ No _____

5. Most of the other boys in this cottage feel you should try to get along with the staff.

Yes _____ Don't know _____ No _____

6. Most of the other boys in this cottage feel that you should ask counselors or other staff for help.
Yes _____ Don't know _____ No _____
7. Most of the other boys in this cottage feel that you should get by with doing as little as you can here.
Yes _____ Don't know _____ No _____
8. Most of the other boys in this cottage feel that the best way to make it here is to be slick.
Yes _____ Don't know _____ No _____
9. Most of the other boys in this cottage feel you should talk about yourself to some adult on the staff.
Yes _____ Don't know _____ No _____
10. Most of the other boys in this cottage feel that you should try to "con" the staff.
Yes _____ Don't know _____ No _____
11. Most of the other boys in this cottage feel that the best way to make it here is to act tough.
Yes _____ Don't know _____ No _____
12. Most of the other boys in this cottage feel that the best way to make it here is to play it straight.
Yes _____ Don't know _____ No _____
- II. When you first found out you were coming to this training school, what did you think it would be like here?
13. I thought this would be a good place to be sent.
Yes _____ Don't know _____ No _____
14. I thought this would be a place that would help me, rather than a place to punish me.
Yes _____ Don't know _____ No _____
15. I thought I would be helped a great deal by being sent here.
Yes _____ Don't know _____ No _____

16. I thought that I should have nothing to do with the staff when I got here.
Yes _____ Don't know _____ No _____
17. I thought the staff would care about the students.
Yes _____ Don't know _____ No _____
18. I thought that I should try to straighten out and make the best of my stay when I got here.
Yes _____ Don't know _____ No _____
19. I thought I should try to "con" the staff when I got here.
Yes _____ Don't know _____ No _____
20. I thought that I should do as well as I could in my school work subjects when I got here.
Yes _____ Don't know _____ No _____
21. I thought I should try to follow the rules of the training school when I got here.
Yes _____ Don't know _____ No _____
22. I thought that the best way to make it would be to act tough.
Yes _____ Don't know _____ No _____
23. I thought that the best way to make it here would be to play it straight.
Yes _____ Don't know _____ No _____
24. I thought it would be a place where a guy must obey a lot of phoney rules.
Yes _____ Don't know _____ No _____

III. I would like to know some things about your closest friends in the cottage.

A. Closest Friends - Think about the boys in your cottage that you hang around with most at this training school. That is, your very closest friends. For example, the few boys you consider your best buddies.

25. How many closest friends, buddies, in your cottage do you hang around with most of the time? (Circle one number).
0 1 2 3 4 5 6 or more

If you circled 0, please go on to question 31.

26. In my group of closest friends, they generally like the staff here at the school. (That is, they feel the staff help you find out why you got in trouble, are fair and care about the boys in the school).

Yes _____ Don't know _____ No _____

A. If you answered Yes, why? _____

27. In my group of closest friends, they generally feel they are getting help here. (That is, helped by the staff and the counseling and classroom programs).

Yes _____ Don't know _____ No _____

28. In my group of closest friends, they generally feel the rules of the school are O.K. (For example, fair rules).

Yes _____ Don't know _____ No _____

29. In my group of closest friends, they generally feel that you should "con" the staff.

Yes _____ Don't know _____ No _____

30. In my group of closest friends, they generally feel that this institution is pretty good.

Yes _____ Don't know _____ No _____

B. Boys in your cottage. Again, think of the boys in your cottage. Now, think of the leaders, good or bad, among the guys in your cottage. The guys that the other guys will usually listen to or follow. There are bound to be some guys who have more influence over others, so think of them when you answer these questions.

31. How many boys are in this top group of leaders? (Circle one number).

0 1 2 3 4 5 6 or more

If you circled 0, do not answer questions 32 to 42.

Why do you feel these boys are the leaders? (That is, which 3 of the following things about them make them the leaders?).

- | | | | |
|---|---------------------|-------|---------|
| Check the 3 most important things you think are true about the leaders, as a group. | 32. Smart in school | _____ | |
| | 33. Tough | _____ | |
| | 34. Good athletes | _____ | |
| | 35. Good fighter | _____ | (con't) |

36. Honest _____
 37. Good at "conning" _____
 38. Big _____
 39. Kind _____
 40. Good personality _____
 41. "Slick" _____
 42. Other - please list:
 1. _____
 2. _____
 3. _____

IV. Finally, please think about how you feel now as you answer these questions.

43. I think this is a good place to be, compared to what I thought it would be like before I got here.

Yes _____ Don't know _____ No _____

44. This is a place that helps boys, rather than a place to punish them.

Yes _____ Don't know _____ No _____

45. I should try to "con" the staff.

Yes _____ Don't know _____ No _____

46. I have been helped a great deal by my stay here.

Yes _____ Don't know _____ No _____

47. The staff here are a lot of help to me on finding out why I got into trouble.

Yes _____ Don't know _____ No _____

48. I should try to get by with doing as little as I can here.

Yes _____ Don't know _____ No _____

49. The staff members here are pretty fair.

Yes _____ Don't know _____ No _____

50. I should try to straighten out and make the best of my stay here.

Yes _____ Don't know _____ No _____

51. The best way to make it here is to act tough.

Yes _____ Don't know _____ No _____

52. I should do as well as I can in my school work subjects while I am here.

Yes _____ Don't know _____ No _____

53. This seems to be a place where a guy must obey a lot of phoney rules.

Yes _____ Don't know _____ No _____

54. I should try to follow the rules of the training school.

Yes _____ Don't know _____ No _____

V. Discussion Groups, Point System and School Subjects. Finally, think about the discussion groups you have in your cottage. That is, the groups of about 12 or 15 boys that you sit around with and talk about your problems with your counselors. The groups that meet in the evening.

55. Do you think the discussion group program has helped you?

Check one.

Helped a lot _____
 Helped some _____
 Helped a little _____
 No help _____

56. When I am in my discussion group, I talk: Check one.

A lot _____
 Some _____
 A little _____
 Not at all _____

57. In my opinion using discussion groups to talk over problems is: Check one.

Very good _____
 Good _____
 O.K. _____
 Bad _____
 Very bad _____

Now, think of the point system that is used here. That is, when you are paid points for participation in the school program. For example, in the classroom.

58. Do you think this point system has helped you behave better?

Helped a lot _____
 Helped some _____
 Helped a little _____
 No help _____

59. Do you think this point system has helped you to achieve in classes?

Helped a lot _____
 Helped some _____
 Helped a little _____
 No help _____

60. Do you try to behave well here at the school to get the points?
 Check one.

Yes _____ Sometimes _____ No _____

61. In my opinion using the point system to help boys is: (Check one).

Very good _____
 Good _____
 O. K. _____
 Bad _____
 Very bad _____

Think about the school program here as you answer this question.
 That is, the shop and academic subject classes that you go to each day.

62. Do you think this school program has helped you? (Check one).

Helped a lot _____
 Helped some _____
 Helped a little _____
 No help _____

63. When you are in class, do you try hard to learn? (Check one).

Try hard _____
 Try some _____
 Try a little _____
 Don't try at all _____

64. My opinion of the school program here is: (Check one).

Very good _____
 Good _____
 O.K. _____
 Bad _____
 Very bad _____

65. Now, think about your behavior here at the training school over the past two weeks. Please check how many times you have been written up for doing something you should not do.

0 times _____
 1 time _____
 2 times _____
 3 or more times _____

66. How long have you been here, at the Maryland Training School, during your present stay? (Write number of months).

_____ months.

If less than 1 month, write number of weeks.

_____ weeks.

THANK YOU VERY MUCH FOR YOUR HELP !!!

Appendix C

Questionnaire: Group Discussion Leaders

Dear

As part of a study for my Ph.D. dissertation in Sociology at the University of Maryland, I would greatly appreciate your answering three questions regarding each boy in your counseling groups. It will take only about 25 minutes and your responses will be kept strictly confidential. That is, none of the boys nor any other member of the staff will see your responses. The results will later be compiled and put into a report so that no boy, staff member, cottage or discussion group will be identified. The purpose of the study is to analyze what factors, for example peer groups, influence the adjustment of the boys at the training school. By adjustment I mean their behavior at the school and their use of the treatment programs.

Please respond in a completely candid manner as the results of the study depend in part, upon your answers. I would appreciate your completing and returning these questionnaires to your Cottage Life Supervisor by Thursday, March 6, 1975.

Thank you so much for your cooperation on this task.

Sincerely,

Ronald Tait

Name of boy _____

Unit _____

Discussion Group _____

1. "To what extent does this boy involve himself, that is, actively take part in, your counseling program?" (Please check one category).

a. Usually involves himself in the program _____

b. Tends to sometime involve himself in the program . _____

c. Ambivalent, in conflict, as to whether or not to involve himself _____

d. Indifferent to program. _____

e. Tends toward not involving himself in program. . . . _____

f. Does not involve himself in program _____

2. Do you think the discussion group program has helped him? (That is, with his problems).

Please check <u>one</u> category.	Helped a lot	_____
	Helped some	_____
	Helped a little	_____
	No help	_____

3. When he is in the discussion group, he talks:

A lot	_____
Some	_____
A little	_____
Not at all	_____

Appendix D

Questionnaire: Cottage Supervisors

Dear

As part of a study for my Ph. D. dissertation in Sociology at the University of Maryland, I would greatly appreciate your answering four questions regarding each boy in your cottage. It will take only about 25 minutes and your responses will be kept strictly confidential. That is, none of the boys nor any other member of the staff will see your responses. The results will later be compiled and put into a report so that no boy, staff member, cottage or discussion group will be identified. The purpose of the study is to analyze what factors, for example peer groups, influence the adjustment of the boys at the training school. By adjustment I mean their behavior at the school and their use of the treatment programs.

Please respond in a completely candid manner as the results of the study depend, in part, upon your answers. I would appreciate your completing and returning these questionnaires to your Cottage Life Supervisor by Thursday, March 6, 1975.

Thank you so much for your cooperation on this task.

Sincerely,

Ronald Tait

Name of boy _____

Unit _____

1. Please rate this boy's cottage unit adjustment, as revealed in his conduct and attitudes during the last two weeks. Base your ratings on the standard of cottage adjustment which is generally expected of boys in your cottage. (Check one category).

Excellent _____
 Good _____
 Fair _____
 Poor _____
 Very poor _____

Please rate this boy on the following three characteristics, over the past two weeks.

2. Aggressiveness - Tendency to readily react aggressively toward others (for example, toward boys or staff in cottage). Please check one category.

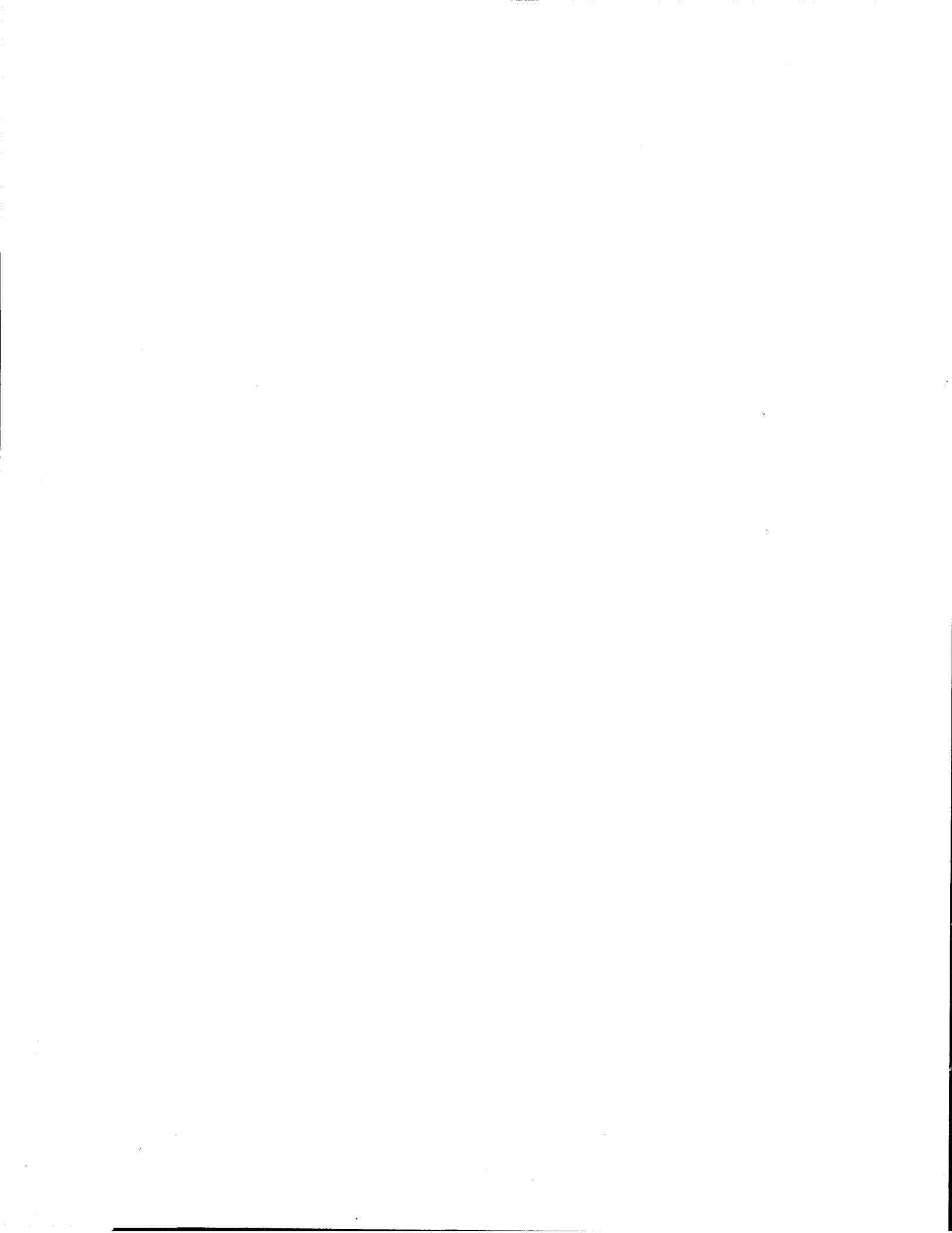
Very aggressive _____
 Somewhat aggressive _____
 Slightly aggressive _____
 Not at all aggressive _____

3. Rule obeying behavior (For example, tendency to obey the rules of the training school and cottage). Please check one category.

Very obedient _____
 Somewhat obedient _____
 Somewhat disobedient _____
 Very disobedient _____

4. Trust in others, especially trust in those representing authority. (For example, the staff at the school and cottage). Check one.

Very trusting _____
 Somewhat trusting _____
 Somewhat distrusting _____
 Very distrusting _____



CONTINUED

2 OF 3

Appendix E

Preliminary Questionnaire

This questionnaire is for a study by the researcher for his degree at the University of Maryland. Your answers will not be seen by any of the staff here at the school or by anyone else but the researcher. You do not even put your name on the questionnaire.

There are no right or wrong answers. It is only how you feel about the questions that is important.

Please be sure to answer every question. Your answers are the most important part of the study, so please give your honest opinions.

I. I would like your opinions about some things in your cottage. Now, think of the other boys in your cottage as you answer these questions.

1. Most of the other boys in this cottage feel you should be ready to fight other guys at most any time.

Yes _____ Don't know _____ No _____

2. Most of the other boys in this cottage feel you should have nothing to do with the staff.

Yes _____ Don't know _____ No _____

3. Most of the other boys in this cottage feel you should try to straighten out and make the best of your stay at this training school.

Yes _____ Don't know _____ No _____

4. Most of the other boys in this cottage feel you should try to do well in your school work subjects.

Yes _____ Don't know _____ No _____

5. Most of the other boys in this cottage feel you should obey the rules of this institution.

Yes _____ Don't know _____ No _____

6. Most of the other boys in this cottage feel you should try to get along with the staff.
Yes _____ Don't know _____ No _____
7. Most of the other boys in this cottage feel that you should ask counselors or other staff for help.
Yes _____ Don't know _____ No _____
8. Most of the other boys in this cottage feel that you should get by with doing as little as you can here.
Yes _____ Don't know _____ No _____
9. Most of the other boys in this cottage feel that the best way to make it here is to be slick.
Yes _____ Don't know _____ No _____
10. Most of the other boys in this cottage feel you should talk about yourself to some adult on the staff.
Yes _____ Don't know _____ No _____
11. Most of the other boys in this cottage feel that you should try to "con" the staff.
Yes _____ Don't know _____ No _____
12. Most of the other boys in this cottage feel that the best way to make it here is to act tough.
Yes _____ Don't know _____ No _____
13. Most of the other boys in this cottage feel that the best way to make it here is to play it straight.
Yes _____ Don't know _____ No _____
- II. I would now like your opinions about how you felt about coming to this training school. For example, what were your feelings when you first found out you were to be sent here. So, as well as you can remember, please answer these questions about how you felt when you found out you were to be sent to this school.
14. I thought this would be a good place to be sent.
Yes _____ Don't know _____ No _____

15. I thought I would rather be sent to this institution than some other.
Yes _____ Don't know _____ No _____
16. I thought this would be a place that would help me, rather than a place to punish me.
Yes _____ Don't know _____ No _____
17. I thought I would be helped a great deal by being sent here.
Yes _____ Don't know _____ No _____
18. I thought the staff here would be a lot of help in finding out why I got into trouble.
Yes _____ Don't know _____ No _____
19. I thought the staff members would be pretty fair.
Yes _____ Don't know _____ No _____
20. I thought the staff would care about the students.
Yes _____ Don't know _____ No _____
21. I thought that I should have nothing to do with the staff when I got here.
Yes _____ Don't know _____ No _____
22. I thought that I should try to straighten out and make the best of my stay when I got here.
Yes _____ Don't know _____ No _____
23. I thought that I should do as well as I could in my school work subjects when I got here.
Yes _____ Don't know _____ No _____
24. I thought I should try to follow the rules of the training school when I got here.
Yes _____ Don't know _____ No _____
25. I thought I should try to "con" the staff when I got here.
Yes _____ Don't know _____ No _____
26. I thought I should get by with doing as little as possible here.
Yes _____ Don't know _____ No _____

27. I thought that the best way to make it would be to act tough.
 Yes _____ Don't know _____ No _____
28. I thought that the best way to make it here would be to play it straight.
 Yes _____ Don't know _____ No _____
29. I thought it would be a place where a guy must obey a lot of phoney rules.
 Yes _____ Don't know _____ No _____
- III. I would like to know some things about your closest friends in the cottage and also about the other boys in your cottage.
- A. Closest Friends - Think about the boys in your cottage that you hang around with most at this training school. That is, your very closest friends.
30. How many boys in your cottage do you hang around with most of the time? (Circle one number).
 0 1 2 3 4 5 6 or more
31. In my group of closest friends, they generally like the staff here at the school. (That is, they feel the staff help you find out why you got in trouble, are fair and care about the boys in the school).
 Yes _____ Don't know _____ No _____
32. In my group of closest friends, they generally feel they are getting helped here. (That is, helped by the staff and the counseling and classroom programs).
 Yes _____ Don't know _____ No _____
33. In my group of closest friends, they generally feel the rules of the school are O.K. (For example, fair rules).
 Yes _____ Don't know _____ No _____
34. In my group of closest friends, they generally feel that you should play it straight and not "con" the staff.
 Yes _____ Don't know _____ No _____
35. In my group of closest friends, they generally feel that this institution is pretty good.
 Yes _____ Don't know _____ No _____

B. Boys in your cottage.

Again, think of the boys in your cottage.

36. Are there some boys who are definitely the leaders of the cottage?

Yes _____ Don't know _____ No _____

37. How many boys are in this top group of leaders? (Circle one number).

0 1 2 3 4 5 6 or more

Why do you feel these boys are the leaders? (That is, which of the following things about them make them the leaders?)

- | | | |
|---|-----------|----------------------|
| Check the 3 most important things you think are true about the leaders, as a group. | 38. _____ | Smart in school |
| | 39. _____ | Tough |
| | 40. _____ | Good athletes |
| | 41. _____ | Good fighter |
| | 42. _____ | Honest |
| | 43. _____ | Good at "conning" |
| | 44. _____ | Big |
| | 45. _____ | Kind |
| | 46. _____ | Good personality |
| | 47. _____ | "Slick" |
| | 48. _____ | Other - Please list: |
| | 1. _____ | |
| | 2. _____ | |
| | 3. _____ | |

49-50. What is the job of the main wage earner in your family?
For example, either your father or mother or step-father or step-mother or foster mother or foster father or guardian or other relative.

The job _____

Relation to you _____

51-52. What is your age? _____.

IV. Finally, please think about how you feel now as you answer these questions.

53. I would rather stay in this institution than in some other institution.

Yes _____ Don't know _____ No _____

54. I think this is a good place to be. compared to what I thought it would be like before I got here.
Yes _____ Don't know _____ No _____
55. This is a place that helps boys, rather than a place to punish them.
Yes _____ Don't know _____ No _____
56. I have been helped a great deal by my stay here.
Yes _____ Don't know _____ No _____
57. The staff here are a lot of help to me on finding out why I got into trouble.
Yes _____ Don't know _____ No _____
58. The staff members here are pretty fair.
Yes _____ Don't know _____ No _____
59. The staff members here seem to care about the boys.
Yes _____ Don't know _____ No _____
60. The best way to make it here is to have little or nothing to do with the staff.
Yes _____ Don't know _____ No _____
61. I should try to straighten out and make the best of my stay here.
Yes _____ Don't know _____ No _____
62. I should do as well as I can in my school work subjects while I am here.
Yes _____ Don't know _____ No _____
63. I should try to follow the rules of the training school.
Yes _____ Don't know _____ No _____
64. I should try to "con" the staff.
Yes _____ Don't know _____ No _____
65. I should try to get by with doing as little as I can here.
Yes _____ Don't know _____ No _____
66. The best way to make it here is to act tough.
Yes _____ Don't know _____ No _____

67. The best way to make it here is to play it straight.
Yes _____ Don't know _____ No _____
68. This seems to be a place where a guy must obey a lot of phoney rules.
Yes _____ Don't know _____ No _____
69. How many letters over the past two weeks did you get from members of your family?

70. How many visits over the past two weeks did you get from your family?

71. How long have you been at the training school?
_____ weeks _____ months

Appendix F

Guidelines for Interviewers

Go over these, but DON'T take them to do the interviewing.

1. You will be reading the questionnaire to a group of four boys at a time. Mrs. DeWees, vice-principal of the Senior School at M. T. S., will call for the boys to come from the cottages to see you. I think you will do groups of four all from one cottage unit.
2. To start off the group, hand out the questionnaires to each boy according to his name on the label on the questionnaire. Make certain the right boy gets the questionnaire with his name on the label. Also, hand out pencils to each boy. Make sure the boys sit separately, spaced by a chair or so. This is to cut down on them talking about what their friends answered, not to prevent cheating. There are no right or wrong answers.
3. When they have the questionnaires, tell them to tear off the label and keep it and that they don't put their names on the questionnaire.
4. Read explanation to them at top of Opinion Survey, and Stress:
 1. No right or wrong answers
 2. Answer each question if I can
 3. Honest opinions
 4. Whether this is a good study depends on their honest answers and OWN opinions

Also, that there are 150 boys at the Training School being interviewed, so that the number on left top of page is to make sure we

interview all 150 boys. Need to do this to make it a good study.

5. Then, go quickly into the questionnaire, reading it to them, question by question. If they push for an answer to the number, which I don't think they will, tell them other boys are being interviewed next week so we need to keep track of who has or who has not been interviewed or as last resort might have to check with their group discussion leader about their cottage and its behavior.
6. Go question by question, make certain they understand each question and that they are checking in all answers.
7. Collect questionnaires and pencils and thank them for their help.

Appendix G

Guidelines for Looking Up Records

1. On a card for each boy, write his full name and cottage unit number.
2. Write race of boy - white or non-white.
3. Write number of juvenile court appearances for boy. Then list the type of offense (for example, truancy, car theft or larceny), the adjudication and disposition by the judge and the date of the offense.
4. Get job of main wage earner and relation of main wage earner to boy, (for example, hospital aid - mother).
5. Look only for the above bits of information as we need to move quickly to cover 150 records.
6. Replace file into proper sequence as explained by the staff.

Appendix H

Guides To Summarize Descriptive Data

- A. Check that QUESTIONNAIRE (Name and Number) corresponds to correct Staff Evaluation Sheets on the particular boy. Note: Order by which data sources should be stapled is:
1. Questionnaire
 2. Group Discussion Leader Sheet (3 questions)
 3. Cottage Supervisor Sheet (4 questions)
 4. Boy's Record Card
- B. Code from these four sources of data, onto code card, as shown in example on next page.
- C. Interviewers who recall a questionnaire by a particular boy in your unit who seemed to give less than candid answers, set it aside. Also, as you are coding, if any questionnaire seems, by the nature of the responses, to be questionable, set it aside.

Appendix H

FRONT OF CARD

<u>QUESTIONNAIRE</u>		Roll Call List #	Name of Boy, Unit, Discussion Group	Race (White or Non-white)
I. Cottage Norms	III. A. Cliques	IV. Attitudes	RECORD	
1. _____	26. _____	43. _____	CARD	
2. _____	t _____	t _____	Number	
3. _____	h _____	h _____	of Court	
4. _____	r _____	r _____	Appear-	
5. _____	u _____	u _____	ances	
6. _____	30. _____	54. _____		
7. _____				
8. _____	TOTAL _____	TOTAL _____		

<u>EVALUATION SHEETS</u>		Occupation of Head of House- hold _____
Discussion Group Leaders (3 questions)	1. _____	<u>QUESTIONNAIRE</u>
	2. _____	Pre-T.S. Ats.
	3. _____	III 13. _____
Cottage Supervisors (4 questions)		t _____
	1. _____	h _____
	2. _____	r _____
	3. _____	u _____
	4. _____	24. _____
		TOTAL _____

BACK OF CARD:

<u>QUESTIONNAIRE</u>	
V. Discussion Groups, Point System and School Subjects.	III. A. Closest Friends
D.G. 55. _____	_____ (#0 1, 2, 3, 4, 5, 6 or more)
56. _____	B. Leaders
57. _____	_____ (#0, 1, 2, 3, 4, 5, 6 or more)
Point Sys. 58. _____	32. Criteria for Leadership
59. _____	thru (write in what 3
60. _____	41. _____ they checked)
61. _____	
School Pro. 62. _____	64. _____ 66. _____ Weeks
63. _____	OTHER (write what
	1. _____ they wrote)
	2. _____ 3. _____

APPENDIX I
 PREDICTED CORRELATIONS AND PATH ESTIMATION
 EQUATIONS

Model for Use of Counseling Program

Attitudes Toward Help (X₅). The equations for the predicted correlations between X₅ and the four exogenous, pre-training school variables are:

$$\begin{aligned} r_{51} &= P_{51} + P_{52} r_{21} + P_{53} r_{31} + P_{54} r_{41} \\ &= (.211) + (-.174)(.227) + (.125)(.104) + (-.174)(-.040) = .191 \end{aligned}$$

$$\begin{aligned} r_{52} &= P_{52} + P_{51} r_{12} + P_{53} r_{32} + P_{54} r_{42} \\ &= (-.174) + (.211)(.227) + (.125)(.099) + (-.174)(.070) = -.125 \end{aligned}$$

$$\begin{aligned} r_{53} &= P_{53} + P_{51} r_{13} + P_{52} r_{23} + P_{54} r_{43} \\ &= (.125) + (.211)(.104) + (-.174)(.099) + (-.174)(-.009) = .132 \end{aligned}$$

$$\begin{aligned} r_{54} &= P_{54} + P_{51} r_{14} + P_{52} r_{24} + P_{53} r_{34} \\ &= (-.174) + (.211)(-.040) + (-.174)(.070) + (.125)(.009) = -.193 \end{aligned}$$

Clique Attitudes (X₅).

$$\begin{aligned} r_{81} &= P_{82} r_{21} + P_{83} r_{31} + P_{84} r_{41} \\ &= (.150)(.227) + (-.201)(.104) + (-.234)(-.040) = .023 \end{aligned}$$

$$\begin{aligned} r_{82} &= P_{82} + P_{83} r_{32} + P_{84} r_{42} \\ &= (.150) + (-.201)(.099) + (-.234)(.070) = .114 \end{aligned}$$

$$\begin{aligned} r_{83} &= P_{83} + P_{82} r_{23} + P_{84} r_{43} \\ &= (-.201) + (.150)(.099) + (-.234)(.009) = -.188 \end{aligned}$$

$$\begin{aligned} r_{84} &= P_{84} + P_{82} r_{24} + P_{83} r_{34} \\ &= (-.234) + (.150)(.070) + (-.201)(.009) = -.220 \end{aligned}$$

Length of Stay (X₉).

$$\begin{aligned} r_{91} &= P_{93} r_{31} + P_{94} r_{41} \\ &= (-.275)(.104) + (-.162)(-.040) = -.023 \end{aligned}$$

$$\begin{aligned} r_{92} &= P_{93} r_{32} + P_{94} r_{42} \\ &= (-.275)(.099) + (-.162)(.070) = -.039 \end{aligned}$$

$$\begin{aligned} r_{93} &= P_{93} + P_{94} r_{43} \\ &= (-.275) + (-.162)(.009) = -.276 \end{aligned}$$

$$\begin{aligned} r_{94} &= P_{94} + P_{93} r_{34} \\ &= (-.162) + (-.275)(.009) = -.164 \end{aligned}$$

Use of Program (X₁₀) and Expectation of Help (X₁).

$$\begin{aligned} r_{101} &= P_{105} r_{51} + P_{108} r_{81} + P_{109} r_{91} \\ &= P_{105} (P_{51} + P_{52} r_{21} + P_{53} r_{31} + P_{54} r_{41}) + \\ &\quad P_{108} (P_{82} r_{21} + P_{83} r_{31} + P_{84} r_{41}) + \\ &\quad P_{109} (P_{93} r_{31} + P_{94} r_{41}) \\ &= P_{105} P_{51} + P_{105} P_{52} r_{21} + P_{105} P_{53} r_{31} + P_{105} P_{54} r_{41} + \\ &\quad P_{108} P_{82} r_{21} + P_{108} P_{83} r_{31} + P_{108} P_{84} r_{41} + \\ &\quad P_{109} P_{93} r_{31} + P_{109} P_{94} r_{41} \\ &= (.202)(.211) + (.202)(-.174)(.227) + (.202)(.125)(.104) + \\ &\quad (.202)(-.174)(-.040) + (.163)(.150)(.227) + \\ &\quad (.163)(-.201)(.104) + (.163)(-.234)(-.040) + \\ &\quad (.283)(-.275)(.104) + (.283)(-.162)(-.040) = .037 \end{aligned}$$

Use of Program (X₁₀) and Race (X₂).

$$\begin{aligned} r_{102} &= P_{105} r_{52} + P_{108} r_{82} + P_{109} r_{92} \\ &= P_{105} (P_{52} + P_{51} r_{12} + P_{53} r_{32} + P_{54} r_{42}) + \\ &\quad P_{108} (P_{82} + P_{83} r_{32} + P_{84} r_{42}) + \\ &\quad P_{109} (P_{93} r_{32} + P_{94} r_{42}) \end{aligned}$$

(continued next page)

$$\begin{aligned}
&= (.202)(-.174) + (.202)(.211)(.227) + (.202)(.125)(.099) + \\
& (.202)(-.174)(.070) + (.163)(.150) + (.163)(-.201)(.099) + \\
& (.163)(-.234)(.070) + (.283)(-.275)(.099) + \\
& (.283)(-.162)(.070) = -.025
\end{aligned}$$

Use of Program (X₁₀) and Expectation for Behavior (X₃).

$$\begin{aligned}
r_{103} &= P_{105} r_{53} + P_{108} r_{83} + P_{109} r_{93} \\
&= P_{105} (P_{53} + P_{51} r_{13} + P_{52} r_{23} + P_{54} r_{41}) + \\
& P_{108} (P_{83} + P_{82} r_{23} + P_{84} r_{43}) + \\
& P_{109} (P_{93} + P_{94} r_{43}) \\
&= P_{105} P_{53} + P_{105} P_{51} r_{13} + P_{105} P_{52} r_{23} + P_{105} P_{54} r_{41} + \\
& P_{108} P_{83} + P_{108} P_{82} r_{23} + P_{108} P_{84} r_{43} + \\
& P_{109} P_{93} + P_{109} P_{94} r_{43} \\
&= (.202)(.125) + (.202)(.211)(.104) + (.202)(-.174)(.099) + \\
& (.202)(-.174)(-.040) + (.163)(-.201) + \\
& (.163)(.150)(.099) + (.163)(-.234)(.009) + (.283)(-.275) + \\
& (.283)(-.162)(.009) = -.082
\end{aligned}$$

Use of Program (X₁₀) and Delinquency Involvement (X₄).

$$\begin{aligned}
r_{104} &= P_{105} r_{54} + P_{108} r_{84} + P_{109} r_{94} \\
&= P_{105} (P_{54} + P_{51} r_{14} + P_{52} r_{24} + P_{53} r_{34}) + \\
& P_{108} (P_{84} + P_{82} r_{24} + P_{83} r_{34}) + \\
& P_{109} (P_{94} + P_{93} r_{34}) \\
&= P_{105} P_{54} + P_{105} P_{51} r_{14} + P_{105} P_{52} r_{24} + P_{105} P_{53} r_{34} + \\
& P_{108} P_{84} + P_{108} P_{82} r_{24} + P_{108} P_{83} r_{34} + \\
& P_{109} P_{94} + P_{109} P_{93} r_{34} \\
&= (.202)(-.174) + (.202)(.211)(-.040) + (.202)(-.174)(.070) + \\
& (.202)(.125)(.009) + (.163)(-.234) + (.163)(.150)(.070) + \\
& (.163)(-.201)(.009) + (.283)(-.162) + \\
& (.283)(-.275)(.009) = -.121
\end{aligned}$$

MODEL FOR COTTAGE BEHAVIOR

Specific Cottage Norm (X_6). The equations for the predicted correlations between X_6 and the four exogenous, pre-training school variables are:

$$\begin{aligned} r_{61} &= P_{63} r_{31} \\ &= (.257)(.104) = .018 \end{aligned}$$

$$\begin{aligned} r_{62} &= P_{63} r_{32} \\ &= (.257)(.099) = .025 \end{aligned}$$

$$r_{63} = P_{63} = .257$$

$$\begin{aligned} r_{64} &= P_{63} r_{34} \\ &= (.257)(.009) = .002 \end{aligned}$$

Attitudes Toward Behavior (X_7).

$$\begin{aligned} r_{71} &= P_{71} + P_{73} r_{31} \\ &= (.129) + (.246)(.104) = .155 \end{aligned}$$

$$\begin{aligned} r_{72} &= P_{71} r_{12} + P_{73} r_{32} \\ &= (.129)(.227) + (.246)(.099) = .060 \end{aligned}$$

$$\begin{aligned} r_{73} &= P_{73} + P_{71} r_{13} \\ &= (.246) + (.129)(.104) = .259 \end{aligned}$$

$$\begin{aligned} r_{74} &= P_{71} r_{14} + P_{73} r_{34} \\ &= (.129)(-.040) + (.246)(.009) = -.003 \end{aligned}$$

Clique Attitudes (X₈).

$$r_{81} = P_{82} r_{21} + P_{83} r_{31} + P_{84} r_{41}$$

$$= (.150)(.227) + (-.201)(.104) + (-.234)(-.040) = .022$$

$$r_{82} = P_{82} + P_{83} r_{32} + P_{84} r_{42}$$

$$= (.150) + (-.201)(.099) + (-.234)(.070) = .114$$

$$r_{83} = P_{83} + P_{82} r_{23} + P_{84} r_{43}$$

$$= (-.201) + (.150)(.099) + (-.234)(.009) = -.188$$

$$r_{84} = P_{84} + P_{82} r_{24} + P_{83} r_{34}$$

$$= (-.234) + (.150)(.070) + (-.201)(.009) = -.225$$

Length of Stay (X₉).

$$r_{91} = P_{93} r_{31} + P_{94} r_{41}$$

$$= (-.241)(.104) + (-.193)(-.040) = -.017$$

$$r_{92} = P_{93} r_{32} + P_{94} r_{42}$$

$$= (-.241)(.099) + (-.193)(.070) = -.038$$

$$r_{93} = P_{93} + P_{94} r_{43}$$

$$= (-.241) + (-.193)(.009) = -.243$$

$$r_{94} = P_{94} + P_{93} r_{34}$$

$$= (-.193) + (-.241)(.009) = -.195$$

Cottage Behavior (X₁₁) and Expectation of Help (X₁).

$$r_{111} = P_{116} r_{61} + P_{117} r_{71} + P_{118} r_{81} + P_{119} r_{91}$$

$$= P_{116} (P_{63} r_{31}) +$$

$$P_{117} (P_{71} + P_{73} r_{31}) +$$

$$P_{118} (P_{82} r_{21} + P_{83} r_{31} + P_{84} r_{41}) +$$

$$P_{119} (P_{93} r_{31} + P_{94} r_{41})$$

$$= P_{116} P_{63} r_{31} + P_{117} P_{71} + P_{117} P_{73} r_{31} + P_{118} P_{82} r_{21} +$$

(continued next page)

$$\begin{aligned}
& P_{118} P_{83} r_{31} + P_{118} P_{84} r_{41} + P_{119} P_{93} r_{31} + P_{119} P_{94} r_{41} \\
= & (-.207)(.257)(.104) + (.125)(.129) + (.125)(.246)(.104) + \\
& (-.161)(.150)(.227) + (-.161)(-.201)(.104) + \\
& (-.161)(-.234)(-.040) + (-.123)(-.241)(.104) + \\
& (-.123)(-.193)(-.040) = .011
\end{aligned}$$

Cottage Behavior (X_{11}) and Race (X_2).

$$\begin{aligned}
r_{112} &= P_{116} r_{62} + P_{117} r_{72} + P_{118} r_{82} + P_{119} r_{92} \\
&= P_{116} (P_{63} r_{32}) + P_{117} (P_{71} r_{12} + P_{73} r_{32}) + \\
&\quad P_{118} (P_{82} + P_{83} r_{32} + P_{84} r_{42}) + \\
&\quad P_{119} (P_{93} r_{32} + P_{94} r_{42}) \\
&= P_{116} P_{63} r_{32} + P_{117} P_{71} r_{12} + P_{117} P_{73} r_{32} + \\
&\quad P_{118} P_{82} + P_{118} P_{83} r_{32} + P_{118} P_{84} r_{42} + \\
&\quad P_{119} P_{93} r_{32} + P_{119} P_{94} r_{42} + P_{112} \\
&= (-.207)(.257)(.099) + (.125)(.129)(.227) + \\
&\quad (.125)(.246)(.099) + (-.161)(.150) + (-.161)(-.201)(.099) + \\
&\quad (-.161)(-.234)(.070) + (-.123)(-.241)(.099) + \\
&\quad (-.123)(-.193)(.070) + (-.262) = -.273
\end{aligned}$$

Cottage Behavior (X_{11}) and Expectation for Behavior (X_3).

$$\begin{aligned}
r_{113} &= P_{116} r_{63} + P_{117} r_{73} + P_{118} r_{83} + P_{119} r_{93} \\
&= P_{116} (P_{63}) + P_{117} (P_{73} + P_{71} r_{13}) + P_{118} (P_{83} + P_{82} r_{23} + P_{84} r_{43}) + \\
&\quad P_{119} (P_{93} + P_{94} r_{43}) \\
&= P_{116} P_{63} + P_{117} P_{73} + P_{117} P_{71} r_{13} + P_{118} P_{83} + \\
&\quad P_{118} P_{82} r_{23} + P_{118} P_{84} r_{43} + P_{119} P_{93} + P_{119} P_{94} r_{43} \\
&= (-.207)(.257) + (.125)(.246) + (.125)(.129)(.104) + \\
&\quad (-.161)(-.201) + (-.161)(.150)(.099) + (-.161)(-.234)(.009) + \\
&\quad (-.123)(-.241) + (-.123)(-.193)(.009) = .040
\end{aligned}$$

Cottage Behavior (X_{11}) and Delinquency Involvement (X_4).

$$\begin{aligned}
 r_{114} &= P_{116} r_{64} + P_{117} r_{74} + P_{118} r_{84} + P_{119} r_{94} \\
 &= P_{116} (P_{63} r_{34}) + P_{117} (P_{71} r_{14} + P_{73} r_{34}) + \\
 &\quad P_{118} (P_{84} + P_{82} r_{24} + P_{83} r_{34}) + P_{119} (P_{94} + P_{93} r_{34}) \\
 &= P_{116} P_{63} r_{34} + P_{117} P_{71} r_{14} + P_{117} P_{73} r_{34} + \\
 &\quad P_{118} P_{84} + P_{118} P_{82} r_{24} + P_{118} P_{83} r_{34} + P_{119} P_{94} + \\
 &\quad P_{119} P_{93} r_{34} \\
 &= (-.207)(.257)(.009) + (.125)(.129)(-.040) + \\
 &\quad (.125)(.246)(.009) + (-.161)(-.234) + (-.161)(.150)(.070) + \\
 &\quad (-.161)(-.201)(.009) + (-.123)(-.193) + (-.123)(-.241)(.009) \\
 &= -.017
 \end{aligned}$$

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