

SUSCEPTIBILITY TO SOCIAL  
INFLUENCE AND RETENTION  
OF OPINION CHANGE....

A. Schmid, 1968

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SUSCEPTIBILITY TO SOCIAL INFLUENCE  
AND RETENTION OF OPINION CHANGE  
IN TWO TYPES OF  
DELINQUENTS

by

Albert Charles Schmid

A dissertation submitted to the faculty of the University  
of Utah in partial fulfillment of the requirements  
for the degree of

Doctor of Philosophy

Department of Psychology

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June, 1958

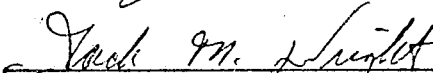
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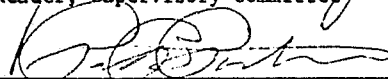
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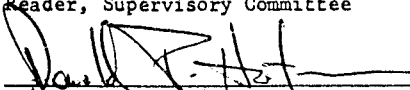
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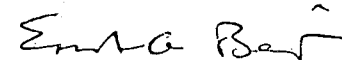
  
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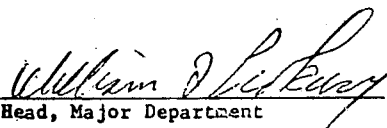
  
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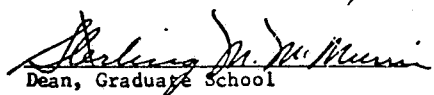
  
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## ABSTRACT

The present investigation was concerned with two aspects of opinion change within a dichotomized delinquent population: (1) susceptibility to social influence; and (2) retention of opinion change. Based upon the conceptual framework advanced by Harvey and his colleagues (1961) and previous research investigating the sleeper effect (Hovland & Weiss, 1951-52; Kelman & Hovland, 1953), the following hypotheses were proposed:

(1) system 1 boys would be more persuasible than system 2 boys under conditions of high source prestige; (2) both groups of boys would exhibit the sleeper effect under conditions of low expertise and low congruence between the source and the stand; and (3) neither group of boys would exhibit the sleeper effect under conditions of high expertise and high congruence between the source and the stand.

Fifty-six boys from the Utah State Industrial School were classified on the basis of the Conceptual Systems Test (Harvey & Hoffmeister, 1967) as predominantly system 1 or system 2. Boys were then assigned randomly to one of four experimental conditions varying in prestige and expertise-congruence. Subsequent to responding to a questionnaire measuring attitudes toward legal agencies, boys were exposed to one of four communicators, varying in background characteristics related to prestige and

expertise-congruence, who advocated a favorable position toward these agencies. Immediately after hearing the sources, boys completed the opinion questionnaire again. Finally, boys responded to the questionnaire three weeks after hearing the communicators. In addition, boys responded to items measuring credibility characteristics and recall of the sources. Discrepancy scores comprised the primary data and were evaluated by analysis of variance. Credibility ratings were assessed in terms of chi square.

The credibility ratings indicated that the sources effectively represented the experimental selection of the expertise and congruence variables, but failed to support the selection of the prestige variable. Therefore, findings which involved the prestige dimension were largely discounted. The results failed to support Hypotheses I and II, but were consonant with Hypothesis III. Immediately after hearing the communicators, it was found that system 1 boys were more persuasible under conditions of high expertise-congruence; while system 2 boys were more persuasible under conditions of low expertise-congruence. After three weeks, system 2 boys exhibited an increased assimilation effect, while system 1 boys showed a substantial contrast effect. System 2 boys remained more persuasible under low expertise-congruence conditions, while system 1 boys were less resistant to social influence under high expertise-congruence conditions. The sleeper effect tended

to occur under conditions of low expertise-congruence only for system 2 boys.

The findings were interpreted in terms of differential responsiveness to authority-related cues of the communication sources, and as generally in support of the conceptual framework advanced by Harvey and his colleagues (1961). Various limitations of the research, such as the problem of prestige, the simultaneous variation of expertise and congruence, and the social desirability variable, were discussed. Several implications were presented which relate to the rehabilitation of delinquent boys within the institution, and upon release to the community. Finally, implications for future research were considered.

## CHAPTER I

### INTRODUCTION

This investigation compared the influencibility of two groups of delinquent boys, one representing an essentially authoritarian orientation and the other an anti-authority orientation. The comparisons were made at two points in time under conditions wherein the subjects were exposed to a communication advocating favorable opinions toward the juvenile court and detention. Thus, it was possible to compare the immediate and the delayed impact of the communication on subjects having different orientations toward authority. Furthermore, the study assessed the relative impact of communicators who varied in both expertise and congruence between what they would be expected to say and what they actually said.

The purpose was to focus upon two aspects of opinion, or attitude, change: (1) susceptibility to social influence; and (2) retention of opinion change. Susceptibility to social influence was considered important with respect to the particular population sampled in this investigation. In general, juvenile delinquents are often viewed as being resistive to usual verbal socialization practices in that they do not conform to more pervasive societal norms. Therefore, delinquents appeared to be an interesting population in which to investigate attitude change.

In contrast to the more usual attempts to categorize delinquent boys on the basis of personality traits, this investigation classified them in terms of conceptual development and functioning. The particular conceptual scheme followed permitted the prediction of differential susceptibility to social influence for the two groups under conditions of varying communicator characteristics. Specifically, the two groups were hypothesized to differ in their response to low and high prestige communicators.

Retention of opinion change has important implications for the permanency of attitude change. A phenomenon which has been found to be of central importance for the retention of opinion change is the " sleeper effect." Previous researches which have demonstrated this phenomenon have usually indicated that, compared with immediate opinion changes, there tends to be a decrease in agreement with a high prestige communicator and an increase in agreement with a low prestige communicator over time. Since the variables of expertise and congruence have been advanced to account for the phenomenon, this investigation evaluated communicators which also varied in terms of their qualifications to speak about the juvenile court and detention, and the degree to which they might be expected to say what they said about the two legal agencies.

In order to develop further the rationale for the investigation, a discussion of research investigating susceptibility to social influence, personality traits and persuasibility of delin-

quents, a cognitive framework for conceptualizing delinquency, and the " sleeper effect " is necessary.

#### Susceptibility to Social Influence

Social-psychological investigators have traditionally been concerned with variables affecting interpersonal behaviors. Of major contemporary interest have been investigations of various parameters affecting attitude formation and change. Attitude change has often been considered in terms of persuasibility. Substantial research effort has been devoted to examining specific parameters which are likely to affect susceptibility to social influence (Hovland & Janis, 1959; Sherif & Hovland, 1961).

Several factors have been found to affect the direction and degree of attitude change. Situational factors, such as group versus solitary exposure to communication (Brodbeck, 1956), private versus public commitment after exposure to a communication (Hovland, Campbell, & Brock, 1957), and group decision (Bennett, 1955) affect susceptibility to social influence. The source of information has been studied in terms of credibility (Hovland & Weiss, 1951-52), attractiveness (Tannenbaum, 1956), and group affiliations (Katz & Lazarsfeld, 1955). Male sources tend to have a greater persuasive effect upon audiences of either sex (Whittaker, 1965). The medium utilized in presenting information also affects attitude change. For example, Lazarsfeld, Berelson, and Gaudet (1944) reported that personal influence was more effective in inducing opinion changes than mass media.

Finally, the form and content of information influences the degree to which persons are susceptible to social influence (Hovland & Mandell, 1952; Hovland & Pritzker, 1957; Janis & Feshbach, 1953; McGuire, 1957).

A review of the relevant literature concerning aspects of the target audience which facilitate persuasibility reveals a number of characteristics. Susceptible individuals tend to be dependent (Cairns, 1960; Grutchfield, 1955), anxious (Fine, 1957; Gelfand & Winder, 1961; Janis, 1955), compliant (Helson, Blake, & Mouton, 1958; Wiener, Carpenter, & Carpenter, 1956), and low in self-esteem (Cohen, 1959; Gelfand, 1962). Such persons tend to have a high need for social approval (Moeller & Applezweig, 1957), exhibit a low degree of ego strength (Hoffman, 1953), and be susceptible to verbal conditioning (Crowne & Strickland, 1961). In addition, females have been found to be more persuasible than males (Janis & Field, 1959; King, 1959; Whittaker, 1965).

Although most of these characteristics of the target audience generally describe many patients receiving psychotherapy (Heller, 1963), it is uncertain whether juvenile delinquents can be characterized in such terms. Therefore, it was useful to consider research which has been directly concerned with personality traits and susceptibility to social influence in delinquents.



Personality Traits and Persuasibility of Juvenile Delinquents

The term delinquency is a legal concept; and, as such, it has long implied a homogeneous form of behavior (Quay, 1965). In recent years, however, researchers have focused upon classifying delinquents into various types in their attempts to facilitate both the understanding and the treatment of juvenile offenders.

Hewitt and Jenkins (1946) examined intercorrelations in a pioneering research in distinguishing delinquent subtypes. Utilizing 500 case records of children referred to a child guidance clinic, they were able to isolate three types: (1) the unsocialized aggressive; (2) the socialized delinquent; and (3) the overinhibited. Reiss (1952) approached the problem of classifying delinquents somewhat differently. Subsequent to having psychiatrists and social workers categorize delinquents into one of three a priori categories on the basis of case-history records, he compared each category of subjects on various social indices. Reiss found empirical support for his initial delinquent categories: (1) the well-integrated delinquent; (2) the defective superego delinquent; and (3) the weak ego, or emotionally disturbed, delinquent.

In extending the research of Hewitt, Jenkins, and their colleagues, Quay analyzed ratings of personality traits based upon the case histories of 115 institutionalized adolescent delinquents (Quay, 1964). Factor analysis indicated that most of the variance

could be accounted for by three factors which Quay labeled as: (1) the sub-cultural-socialized; (2) the unsocialized-psychopathic; and (3) the neurotic-disturbed. Several of the traits which Quay studied also appeared in Hewitt and Jenkins' delinquent clusters (1946).

More recently, Hurwitz (1965), employing an elaborate multivariate statistical analysis, found three distinct delinquent types in a juvenile-court setting. Although Hurwitz's typology provides more extensive information concerning socio-environmental and intrafamilial variables, his three delinquent types generally correspond to those previously reported.

The previous discussion indicates that delinquency is not a homogeneous form of behavior. Instead, delinquency is increasingly being considered in terms of more heterogeneous "clusters" of personality traits. Although a survey of the relevant literature suggests similar and reliable delinquent subtypes, e. g., socialized, unsocialized, and disturbed, the majority of these investigations have relied upon factor-analytic methodologies. Typologies based upon correlational methods provide some degree of internal consistency, but they offer minimal evidence of predictive validity. Furthermore, the interpretation of particular factors can result in rather arbitrary factor labels.

Research involving the susceptibility to social influence of delinquent boys has been reported by Janis and Rife (1959) and Sartoris (1966). Although Janis and Rife were concerned with

a variety of behavior disorders in addition to delinquency, their investigation has relevance for delinquent behavior change. Employing a questionnaire approach, these investigators obtained results (1959) which are consistent with data for normal subjects, i. e., persons with low levels of self-esteem are more persuasible than persons with high levels of self-esteem. They reported that the inverse correlations between self-esteem and persuasibility are significantly high for deviant subjects. In attempting to account for this latter result, the investigators suggest that more extreme levels of low and high self-esteem are characteristic of deviant behavior groups. In addition, they reported an inverse relationship between behavioral ratings of hostility and persuasibility, and a positive relationship between behavioral ratings of inhibition and passivity, and persuasibility (Janis & Rife, 1959).

Sartoris (1966) restricted his investigation to two adolescent delinquent types based upon Hewitt and Jenkins' criteria (1946): (1) the socialized delinquent; and (2) the unsocialized aggressive. He used both a questionnaire approach and the autokinetic situation within an institutional setting, and was concerned with varying the source of communication (peer, institutional staff member, and prison inmate). Although the effect was statistically unreliable, Sartoris reported that the prison-inmate communication produced the greatest opinion change for both socialized and unsocialized-aggressive delinquents when change was measured with the questionnaire approach. However, Sartoris' results do not provide evidence

of differential susceptibility to social influence between these two delinquent types, regardless of the source of communication.

Correlational approaches have typically measured personality traits (Hewitt & Jenkins, 1946; Jenkins & Glickman, 1947; Quay, 1964), socioeconomic variables (Hurwitz, 1965), or both dimensions (Sowles, 1966) in order to isolate delinquent types. In view of Sartoris' failure to demonstrate differences in susceptibility to social influence between two such delinquent types in an "experimental" setting, however, it seemed worthwhile to consider delinquent behavior within a different perspective: conceptual development and functioning.

#### Harvey's Conceptual Systems of Personality

A consideration of delinquency in terms of cognitive functioning permits the researcher to conceptualize delinquent behavior within a different perspective. Recently, a valuable contribution to cognitive theory and conceptual development was advanced by Harvey, Hunt, and Schroder (1961). These investigators present four principal conceptual systems varying on the dimension of concreteness-abstractness.

System 1 functioning, the most concrete mode of construing and responding to the world . . . , is assumed to evolve from a training history in which the developing individual has been restricted in exploration of his environment and in which his reward has been contingent on his thoughts and actions conforming to the omnipotently and omnisciently imposed standards of the training agent. As an assumed consequence, system 1 representatives manifest such characteristics as: high absolutism and closedness of thought and belief;

high evaluativeness; high positive dependence on, or cathexis with, representatives of institutional authority; high identification with social roles and status positions; high conventionality; and high ethnocentrism or strong beliefs in American superiority. Except in response to guides from formal or institutional authority, system 1 individuals appear to rely upon their own internal standards to a greater extent than representatives of some of the other systems, especially system 3. It is thought, however, that system 1 individuals, more than representatives of the other systems, particularly system 4, maintain their measure of independence from non-authority cues through conceptual closedness and contrast, which tend to prevent potentially conflicting inputs from entering their conceptual or interpretative matrix. In many respects system 1 functioning is closely akin to the syndrome of authoritarianism. Accordingly, system 1 representatives score the highest of the four groups on the F-Scale.

System 2 functioning, immediately above system 1 in abstractness, is assumed to result from capricious and arbitrary child-rearing practices which, owing big to failure to provide stable and predictable big referent points, present the developing child with more diversity and uncertainty than his system at the time can assimilate. Representatives of system 2 thus become distrustful of authority-related cues, but at the same time are devoid of any other reliable and stable guidelines. They, more than persons of any of the other systems, seem to be in a psychological vacuum, guided more by rebellion against the formal norms of society and perceived social pressures than by positive adherence to personally derived standards. In line with their high drive toward autonomy and avoidance of dependency on God, tradition, and most of the referents that serve as positive guides for system 1 individuals, persons of system 2 functioning, next to system 4 representatives, score lowest on the F-Scale (Harvey, 1964, pp. 208-209).

System 3 functioning is considered to be a consequence of overprotection and overindulgence during childhood. Parents

protect the developing child from environmental demands, and restrict his explorations to social intercourse and interpersonal manipulation. As a result of his experience with inordinate influence on his parents, the system 3 individual begins to view himself as a causal force in effecting changes in his world. Although these persons attribute greater causality to themselves than those of systems 1 and 2, they develop a more pervasive dependency upon others than do persons from any other system by virtue of their paucity of experience in problem-solving. System 3 individuals are considered to be the most acquiescent to opinions from the generalized other, with the exception of the conformity of system 1 persons to cues oriented toward authority. System 3 representatives seek many friendships and attempt to avoid utilizing their personal resources in coping with everyday problems. These persons represent the second highest level of abstractness, and score next to the highest on the F-Scale (Harvey, 1964).

System 4 individuals, which represent the highest level of abstractness, score the lowest on the F-Scale. These persons are viewed as developing in a childhood atmosphere of exploratory freedom. They are permitted to solve problems without fear of punishment for deviating from authority standards rendered by adults. Since system 4 persons experience diversity and stability during development, they come to have a highly integrated and differentiated conceptual system. As a consequence, they are

more sensitive and open to environmental cues, more information oriented, and more relative in thought and action. However, system 4 individuals are more reliant upon their personal opinions as valid standards for decision and action than persons of the other systems. Confronted with deviant or new inputs, system 4 persons are more capable of admitting these inputs into their conceptual matrix, and accepting or rejecting them in terms of consonance with their personal criteria (Harvey, 1964).

Harvey and his colleagues have been able to classify individuals into predominantly one or another of these four conceptual systems on the basis of their responses to the Conceptual Systems Test (CST), an instrument developed by Harvey and his co-workers (Harvey & Hoffmeister, 1967). This instrument is an objective scale which is based upon statements made by subjects on a previously developed, semi-projective test, the "This I Believe" (TIB) Test, and upon items from other personality inventories. The TIB Test has high predictive and construct validity, as indicated by several experimental investigations (Brook, 1962; Felknor & Harvey, 1963; Harvey, 1963a, 1963b). Factor analysis of the CST has revealed nine replicated and theoretically meaningful factors from five independent samples (Harvey, 1967).

Juergs and Harvey (1964) have reported the only research investigating delinquents within the conceptual framework advanced by Harvey and his associates. Although not employing

the CST specifically, these investigators were able to classify 100 delinquent boys into predominantly one of the four conceptual systems by utilizing case histories and a survey technique.

System 2 boys comprised nearly 50 per cent of the boys who had been committed only once, but this group accounted for 65 per cent of all the recidivists in their sample. This finding is consonant with the description of system 2 persons in terms of their distrust of authority-related cues, i. e., societal norms. Since these researchers indicated that approximately 80 per cent of all delinquent boys could be classified as either system 1 or system 2, it was considered necessary to restrict the present study to an assessment of these two systems.

In view of the conceptual framework advanced by Harvey and his colleagues, it was plausible to predict that system 1 and system 2 delinquent boys should exhibit differential susceptibility to social influence under a variety of conditions. In view of the authoritarian orientation of system 1 boys, this group should be more persuasible than system 2 boys under conditions of high communicator prestige. In contrast, the anti-authority orientation of system 2 boys should render them more resistant to social influence under such conditions. In addition to the theoretical implications, such a prediction of differential persuasibility has important implications for the rehabilitation of delinquents.



Although immediate persuasibility was important in this research with respect to conceptual development and functioning, a primary interest of the investigation also involved the permanency of opinion change. Therefore, it was important to consider both the research and the theoretical assumptions of a phenomenon which is relevant to the retention of opinion change.

#### The "Sleeper Effect"

A phenomenon which has significant implications for the permanency of attitude change, but which has received relatively little research attention, is the "sleeper effect." Hovland, Lumsdaine, and Sheffield (1949) appear to have been the first investigators to demonstrate and label the phenomenon. The occurrence of the "sleeper effect" seems to be primarily dependent upon three parameters: (1) the credibility, or prestige, of the communication source; (2) temporality; and (3) the degree of association between the source and his stand on an issue.

Hovland and Weiss (1951-52) presented identical communications to two different groups, but varied the prestige of the source, i. e., trustworthy versus untrustworthy communicators. Examining changes in opinion as assessed by questionnaires administered before, immediately after, and four weeks after the communication, they found different results for the immediate and the delayed time periods. Under immediate conditions, subjects exposed to

high prestige sources exhibited more opinion change in the direction advocated than subjects exposed to low prestige sources. Under delayed conditions, however, subjects who had been exposed to high prestige sources exhibited a decrease in agreement with the position advocated; whereas, subjects who had been exposed to low prestige sources exhibited an increase in agreement with the position advocated (the "sleeping effect"). There were no differences between the high and low prestige groups in terms of the amount of factual information retained from the communications under the immediate or the delayed conditions (Hovland & Weiss, 1951-52).

In extending further the investigation of this phenomenon, Kelman and Hovland (1953) studied the effect of "reinstating" the source at the time of delayed testing. Employing positive (trustworthy and well-informed), negative (untrustworthy and poorly informed), and neutral communicators, Kelman and Hovland found results similar to those of Hovland and Weiss (1951-52) when the sources were not reinstated, i. e., a small, but nonsignificant, sleeping effect. However, when communicators were reinstated, there was a slight decline in opinion change (agreement with the source) for both positive and negative communicator groups. There was no evidence of a sleeping effect.

The failure of Kelman and Hovland (1953) to obtain a significant increase in agreement with the position advocated under conditions of low communicator prestige (a sleeping effect) when the communicator was not reinstated seems primarily a

result of the high congruence between the negative source and his stand. They employed a "man on the street" who was presented as being "disrespectful of the law and the community," and who advocated lenient treatment for juvenile offenders. Thus, their negative source advocated a position that was highly congruent (expected) with his background and motives.

Weiss (1953) questioned the assumption that a discounting response inducing nonacceptance of the communication was aroused "implicitly" by the audience's reaction to the credibility of the source. He initially had groups of high school subjects learn the content of a communication. Subsequently, one group was "explicitly" instructed to discount the communication. Weiss found that the group instructed to discount the communication exhibited a sleeper effect.

Hovland and his collaborators hypothesized that the passage of time results in the dissociation of the source from the content of a communication. In summarizing their results, Kelman and Hovland (1953) suggested that the effects of a communication are a joint consequence of (1) content factors which are subject to learning and forgetting and (2) acceptance factors which are subject to the credibility, or prestige, of the source. However, with the passage of time, individuals are less likely spontaneously to associate the source of a communication with the content of a communication, unless the source is reinstated.

Under some conditions, it is reasonable to assume that the arousal of psychological resistance in the audience would result in a reduction of the amount of opinion change produced by a communication, and possibly a shift in the direction opposite to that advocated by the source. Kelley and Volkart (1952) reported that when audience resistance was aroused, opinions shifted negatively following the communication (the "boomerang effect"). However, Weiss (1957) found that such a contrast effect did not occur when a negatively valued source advocated an opinion consonant with that of the audience. Furthermore, Youtz, Robbins, and Havens (1964) failed to find consistent contrast effects, even when their subjects reacted with resentment to persuasive communication in the form of criticism of their stands on an issue. It is important to note, however, that the latter investigators utilized sources of high expertise and trustworthiness, i. e., a panel of professionals.

Recently, an extensive investigation of the persistence of opinion change was reported by Watts and McGuire (1964). These investigators focused upon three distinct problems: (1) the persistence of induced opinion change; (2) the retention of message content; and (3) the relationship between opinion change and recall of the content. They selected four opinion items based upon the homogeneity of college students' responses to an initial questionnaire. Subsequently, persuasive messages, as advocated by positively and negatively valued sources, were

presented six weeks, two weeks, one week, and immediately prior to measures of opinion and memory of various aspects of the communication. Their results indicated that (1) recall of various aspects of the communication declined rapidly in the first week following exposure, and subsequently was forgotten at a much slower rate; (2) persons who were unable to recall the topic of the communication six weeks after exposure retained their changed opinion to a greater extent than persons who were able to recall the topic, whereas the opposite was true for one week after exposure; (3) persons who remember specific arguments exhibited greater opinion change; and (4) persons initially exposed to a positive communicator, and who remembered the source after one, two, and six weeks, exhibited greater attitude change than persons who did not recall the source (Watts & McGuire, 1964).

Although Watts and McGuire did not find a reliable overall sleeper effect, their data for the two- and six-week delay periods revealed a trend similar to a sleeper effect. It seems likely that their failure to produce an overall sleeper effect was due to a possible contaminating effect of the communicators. Watts and McGuire (1964) indicated that there may have been "some systematic difference between the sets of negative and of positive sources used . . . such that the positive sources were systematically more familiar, more interesting, etc., than the negative and, hence, better recalled" (p. 241). Thus, the negatively valued

sources may not have been comparable to the positively valued sources in terms of their representation of the same variable.

The previous considerations suggested important problems for research investigating source characteristics affecting the sleeper effect. Hovland and his colleagues indicated that if the communicator and his stand are so closely associated that one spontaneously remembers the communication source when thinking about the issue, dissociation of the source from the content of the communication may not occur. Feldman (1966) has indicated that varying the link, or association, between the communicator and his stand is an important variable and deserves research attention. He also suggested that such investigations should assess changes in the evaluation of the source by the audience over time.

The majority of experimental investigations have considered source credibility in terms of trustworthiness and expertise. However, a recent factor-analytic investigation of variables involved in communicator credibility (Schweitzer & Ginsburg, 1966) suggests that the audience's perception of the credibility of the source is based upon a number of factors. Therefore, it seemed useful to vary other parameters of source credibility.

In view of the hypothesis advanced by Hovland and his associates to account for the sleeper effect, it was plausible to vary the parameters of expertise and congruence. On the basis of this assumption, the sleeper effect should occur under conditions in which the communicator is highly unqualified and

delivers a message which is highly unexpected in terms of his background characteristics. Conversely, the phenomenon should not occur under conditions in which the source is highly qualified and delivers a communication which is highly expected with respect to his background characteristics.

The previous introduction provided the rationale for this investigation. It is now possible to generate more specific experimental hypotheses in terms of this rationale.

#### Statement of the Problem

This research involved both theoretical and practical aspects. Theoretical interest consisted of investigating persuasibility of delinquents in terms of the conceptual framework advanced by Harvey and his colleagues, as well as the sleeper effect, under varying conditions of communicator prestige, expertise, and congruence between the source and his stand.

The cognitive framework proposed by Harvey and his associates permitted the prediction that system 1 and system 2 delinquent boys would differ in their response to social influence which varied with respect to prestige. System 1 boys, who have an authoritarian orientation, should be more persuasible under conditions of high source prestige than system 2 boys; whereas system 2 boys, who have an anti-authority orientation, should be more resistant to social influence under these conditions than system 1 boys. In this research, communicator prestige was considered in terms of the importance of the source, and was assessed at two levels (low prestige and high prestige).

The theoretical hypothesis advanced by Hovland and his colleagues suggested an assessment of source expertise and congruence as they relate to the sleeper effect. Since these researchers have proposed that the phenomenon is contingent upon conditions of low expertise and low congruence between the source and his stand on an issue, it was predicted that the sleeper effect would occur under these specific conditions. On the other hand, the sleeper effect should not occur under conditions of high expertise and high congruence between the communicator and his stand on an issue. Source expertise referred to the qualifications of the communicator in expressing his communication, and was evaluated at two levels (low expertise and high expertise). Congruence between the source and the stand referred to the extent to which one would expect a particular communicator to take his particular stand on an issue, and was assessed at two levels (low congruence and high congruence). This research varied source expertise and congruence simultaneously.

In summary, the following hypotheses were proposed and subjected to experimental evaluation:

HYPOTHESIS I: System 1 boys are more persuasible than system 2 boys under conditions of high prestige (immediate time interval).  $H_0$  I:  $\bar{X}S_1 > \bar{X}S_2$  (high prestige).



HYPOTHESIS II: Under conditions of low expertise-congruence, both groups of boys exhibit an increased acceptance of low prestige communications (the sleeper effect)(delayed time interval).  $H_0$  II:  $\bar{X}T_d > \bar{X}T_i$  for system 1 and system 2 boys (low expertise-congruence).

HYPOTHESIS III: Under conditions of high expertise-congruence, neither group of boys exhibit an increased acceptance of low prestige communications (no sleeper effect)(delayed time interval).  $H_0$  III:  $\bar{X}T_d = \bar{X}T_i$  for system 1 and system 2 boys (high expertise-congruence).

This research has important implications for rehabilitative and therapeutic procedures concerned with juvenile delinquents. A primary rationale was to demonstrate that certain delinquent boys are susceptible to social influence under specific conditions. Heller's argument (1963) emphasizes the implications of social influence research for the treatment of deviant behaviors.

Although the primary concern was an assessment of the empirical validity of the three principal hypotheses, attention was also focused upon possible differential findings between system 1 and system 2 boys with respect to the sleeper effect. For example, system 2 boys may exhibit a greater sleeper effect than system 1 boys because of their generalized distrust of external referents. This possibility would be contingent upon system 2 boys' being relatively less susceptible to social influence than system 1 boys when persuasibility is ascertained immediately after the communication, and upon a ceiling for both immediate and delayed

attitude change. Thus, changes occurring with the passage of time may be accentuated by differences in persuasibility obtained immediately after the communication.

On the other hand, it is possible that delinquents, regardless of conceptual system, may not exhibit the sleeper effect under any of the experimental conditions because of certain factors, e. g., limited attention and memory span. This rationale was based upon the possibility that delinquents may not hold stable opinions. However, it seemed likely that the attitudes which were sampled in this research would reflect sufficient personal involvement as to prevent extreme fluctuations in opinions.

## CHAPTER II

### METHOD

#### Subjects

Subjects (Ss) were 56 delinquent boys selected from the students at the Utah State Industrial School. Initially, 142 boys within a four-year age range (chronological age 14 through 17) completed the Conceptual Systems Test (CST)(see Appendix A). Each item was read to the boys in groups of about 30, and explanations of items were presented by the experimenter (E) in cases of word difficulty. The response mode for the CST (Harvey & Hoffmeister, 1967) consisted of checking one of six options ranging from "agree very much" to "disagree very much" on a six-point, Likert-type continuum. The modal range of IQ for boys at the School is 90 to 109 (Sowles, 1966).

Of the 142 boys, 50 were found to be predominantly system 1 and 34 to be system 2. From these, the two experimental groups of 28 system 1 and 28 system 2 boys were randomly selected from those boys in the two groups who would be at the School for three months. Following classification, the two groups of system 1 and system 2 boys were assigned randomly to one of four experimental conditions.

The scoring of test responses was based upon nine criterion factors (see Appendix B), and was accomplished by Harvey and

Hoffmeister at the University of Colorado (Boulder).<sup>1</sup> Profile classification, based upon Harvey and Hoffmeister's (1967) cut-off scores, was done by the E. Since only six of the nine factors differentiate system 1 and system 2 boys, profile classification was based on these: (I) Divine Fate Control (DFC); (III) Need for Structure-Order (NS-O); (IV) Moral Absolutism (MA); (VI) Need for People (NP); (VII) Interpersonal Aggression (IA); and (IX) Abstractness (ABST). Harvey and Hoffmeister (1967) reported test-retest reliability coefficients for an undergraduate college sample ranging from  $r=.87$  to  $r=.90$  for all of these factors except IA, which was  $r=.68$ . The oblique factor coefficients for each item, the raw cut-off scores, and the homogeneity ratios for the six criterion factors are presented in Appendix B.

#### Instruments

Opinion Questionnaire. Two scales from Chapman's (1960) battery of scales measuring attitudes toward legal agencies were adopted. One of the scales involved opinions toward the juvenile court (17 items), while the second scale measured attitudes toward detention (16 items). Chapman (1960) reported test-retest reliability coefficients of  $r=.85$  for the juvenile court scale and  $r=.98$  for the detention scale. He also reported split-half reliability coefficients (corrected) ranging from  $r=.92$  to  $r=.98$  for

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<sup>1</sup>Raw factor scores were calculated by computer. Programming of the data was accomplished by O. J. Harvey and J. K. Hoffmeister (University of Colorado, Boulder).

both scales. Chapman's two scales were considered appropriate for this research because of their relatively ego-involving content and the age range of his original standardization sample.

Items of the two attitude scales were intermingled in their original serial order (Chapman, 1960) randomly with 20 "filler" items from Thurstone's (1930) scale measuring attitudes toward movies in order to disguise to some extent the purpose of the entire questionnaire. In addition, there were three items which measured the extent to which each S believed his particular communicator to be important, qualified and expressing a stand congruent (expected) with his role. Another item was administered to measure absolute recall of the name and the occupation of the communicator. Finally, there was one item which measured relative recall of the name and the occupation of the communicator. These five supplemental items were specifically devised for this investigation.

The response mode for the questionnaire items involving legal agencies and movies consisted of checking one of five options ranging from "strongly agree" to "strongly disagree" on a five-point, Likert-type continuum. Score values for each point were as follows:

- (5) Strongly Agree
- (4) Agree
- (3) Undecided
- (2) Disagree
- (1) Strongly Disagree

Since agreement with some items was considered socially less

acceptable (Chapman, 1960), these particular items were scored in reverse. The total score for each S was the sum of all item response values on the two scales measuring attitudes toward detention and the juvenile court. The minimum possible score was 33; the maximum possible, 165. High scores indicated favorable attitudes, while low scores indicated unfavorable attitudes toward the two legal agencies. The entire 53-item questionnaire, as well as a validity index of Chapman's two scales, are presented in Appendix C.

The response mode for items measuring opinions toward communicators consisted of checking one of five alternatives ranging from "highly important (qualified or expected)" to "highly unimportant (unqualified or unexpected)" on a similar five-point, Likert-type continuum. Score values for each point were as follows:

- (5) Highly Important (Qualified or Expected)
- (4) Important (Qualified or Expected)
- (3) Undecided
- (2) Unimportant (Unqualified or Unexpected)
- (1) Highly Unimportant (Unqualified or Unexpected)

These items were used to assess the perceptions of the communication sources and the messages by the Ss. Since these items appeared as supplemental questionnaires administered immediately after, and three weeks after, the communication, they provided indices both of immediate perceptions of the credibility characteristics of the communicators and of changes in perceptions over time.

The item assessing absolute recall of the source required each S to write the name and the occupation of the source without any cues as to his identity. The item measuring relative recall of the source required each S to recognize and select one of seven names and occupations on a multiple-choice basis. These two items provided supplemental data as to the long-range effects of varying simultaneously the parameters of expertise and congruence.

Since these five supplemental items were administered after Ss had completed the items pertaining to legal agencies (and movies), their opinions regarding legal agencies (and movies) were not influenced by either their ratings of the source or their explicit recall (absolute and relative) of the source. The three items measuring credibility characteristics of the communicator and the two single items assessing absolute and relative recall of the source are presented in Appendix D.

Communication Sources. The following simulated sources were employed under the conditions specified:

- (1) Low Prestige-Low Expertise and Low Congruence —  
The communicator was presented as Mr. Duane Smith, a janitor from a local high school who had not completed high school, and who based his knowledge of legal agencies upon hearsay in the school where he worked and upon newspaper reports.
- (2) Low Prestige-High Expertise and High Congruence —  
The communicator was presented as Mr. Allan Brown, a local policeman who had apprehended many delinquent boys, and who had had considerable experience with legal agencies.

(3) High Prestige-Low Expertise and Low Congruence --

The communicator was presented as Mr. Terry Roberts, an automobile designer from Detroit who began as a race driver, and who had worked his way up through the ranks of a major motor company to the position of designer.

(4) High Prestige-High Expertise and High Congruence --

The communicator was presented as Mr. Jim Webster, an ex-convict who had served his prison term for burglary and car theft, and who was currently on parole from the state prison.

The communicator roles were selected largely on an a priori basis in terms of their variability on the dimensions of prestige, expertise, and congruence. Prestige referred to the relative importance of each communicator. The janitor and the policeman were assumed to exhibit characteristics of low prestige because of relatively low status and legal representation, respectively. In contrast, the automobile designer and the ex-convict were assumed to represent attributes of high prestige because of delinquent boys' interest in automobiles and crime, respectively. Sartoris (1966) found that a prison inmate had a greater impact on the opinions of delinquent boys than either his peers or an institutional staff member (nonsignificant result).

The variables of expertise and congruence were varied simultaneously. Expertise referred to the relative qualifications of each source in presenting his communication regarding the juvenile court and detention. The janitor and the automobile designer were considered to represent characteristics of low expertise because of their relative inexperience with legal



agencies; whereas the policeman and the ex-convict were assumed to exhibit attributes of high expertise. Congruence referred to the relative degree to which delinquents would expect each communicator to express his particular position toward the two legal agencies. Thus, the janitor and the automobile designer were assumed to exhibit characteristics of low congruence because delinquent boys should not expect these sources to express a favorable stand toward the juvenile court and detention. In contrast, the policeman and the ex-convict on parole were considered to represent attributes of high congruence because delinquent boys should expect these communicators to express a favorable stand toward the two legal agencies.

The communicator prefaced his speech so as to introduce himself as having the selected background characteristics. The introductions for each source are presented in Appendix E. The four sources were portrayed by the same person in order to achieve a high degree of experimental control. He was a graduate student at the University of Utah who had had considerable experience as an actor. The use of different names for the sources seemed necessary in order to create credibility in the Ss with respect to the background of each communicator, as well as to prevent compromising communication among Ss as much as possible.

Each communicator presented the same communication, which was devised by the E (see Appendix F). Since delinquent boys,

as a group, exhibit relatively unfavorable opinions toward the juvenile court and detention (Chapman, 1960), each source concluded his presentation by advocating a favorable position toward the legal agencies.

#### Procedure

The instructions and each item of the Conceptual Systems Test (CST) (67 items) were read to 142 boys in groups of about 30. Responses were recorded on a separate form on which each S checked one of six options ranging from "agree very much" to "disagree very much" for each item.

Session I ( $T_0$ ). Five weeks after the administration of the CST, the instructions and each item of the opinion questionnaire (53 items) were read to groups of about 15 boys. Answers were recorded on the questionnaire form on which each S checked one of five options ranging from "strongly agree" to "strongly disagree" for each item.

Session II ( $T_1$ ). Three days after Session I, Ss were exposed to one of the four communication sources, depending upon assignment to experimental condition. In each condition, the communicator was introduced to the group as a visiting speaker. Fourteen boys heard the communicator in each role. Immediately following the speech (ten minutes), the opinion questionnaire (53 items) was read to the four groups of Ss. Subsequently, on a separate form, Ss rated the communicator in terms of his credibility characteristics (3 items) and attempted to recall absolutely his name and occupation (1 item).

Session III (T<sub>d</sub>). Three weeks after Session II, the opinion questionnaire (53 items) was again read to all Ss in groups of about 15 boys. Following this administration, Ss again rated the communicator in terms of his credibility characteristics (3 items) and attempted to recall absolutely his name and occupation (1 item) on a separate form. Finally, on another form, Ss attempted to recall relatively the name and the occupation of the communicator (1 item).

#### Experimental Design

A 2 x 2 x 2 x 2 randomized block design (Winer, 1962), with repeated measures on the last factor, was used with two levels of conceptual system (system 1 and system 2), two levels of communicator prestige (low prestige and high prestige), and two levels of expertise-congruence (low expertise and low congruence, and high expertise and high congruence). Repeated measures consisted of two difference scores. All factors were considered to be fixed ( $p=P$ ) for purposes of deriving expected mean squares (EMS).

Discrepancy scores ( $T_1$  scores minus  $T_0$  scores, and  $T_d$  scores minus  $T_0$  scores) were the primary data for the analyses of variance (ANOVA). Since differences between the discrepancy scores of  $T_1 - T_0$  and  $T_d - T_0$  were actually changes between  $T_1$  and  $T_d$ , this method of analysis provided a measure of increases or decreases in opinion change over time. Furthermore, the use of this method

permitted the computation of discrepancy scores from each S's original score ( $T_0$ ). Thus, these scores were considered in terms of deviations from initial base rates.

The supplemental data consisting of credibility ratings, as well as absolute and relative recall of the source, were evaluated in terms of chi square ( $\chi^2$ ). Credibility ratings were assessed primarily with respect to the perceived effect of the particular sources employed. The data from items measuring absolute and relative recall were assessed principally as they related to the long-range effects of varying simultaneously the variables of expertise and congruence.

## CHAPTER III

### RESULTS

#### Ratings of Communication Sources

Ss' ratings of the communicators were taken as an index of the impact of the independent variables. Mean ratings for each group in both the  $T_1$  and the  $T_d$  conditions, as well as the mean changes in ratings between the  $T_1$  and the  $T_d$  conditions are presented in Table 1. The results of the  $\chi^2$  analyses of the immediate source ratings are presented in Table 2. In order to satisfy the criterion that each cell have an expected frequency of five or greater, the extreme categories (one and two, and four and five) were combined (Edwards, 1962).

Table 2 shows three significant chi squares. Boys who were exposed to high expertise-congruence sources rated these communicators as being more qualified ( $\chi^2=6.6$ ,  $df=2$ ,  $p<.05$ ), and rated their communications as being more expected from these sources ( $\chi^2=17.5$ ,  $df=2$ ,  $p<.01$ ), than boys who heard low expertise-congruence sources. Thus, the immediate ratings on the two items involving expertise of the communicator and congruence between the communicator and his stand empirically supported the a priori selection of the sources. In addition, system 1 boys rated communicators in general as being more qualified than did system 2 boys ( $\chi^2=6.8$ ,  $df=2$ ,  $p<.05$ ).

Table 1

Mean Ratings at  $T_i$  and  $T_d$  and Mean Changes in  
Ratings ( $T_d - T_i$ ) of Sources

Rated Attribute of Source		System 1				System 2			
		Low Prestige		High Prestige		Low Prestige		High Prestige	
		Low E-C (J)	High E-C (P)	Low E-C (D)	High E-C (E)	Low E-C (J)	High E-C (P)	Low E-C (D)	High E-C (E)
Prestige (Importance)	$T_i$	3.7	3.0	4.0	3.1	3.0	4.0	3.5	3.1
	$T_d$	3.3	3.3	3.7	3.4	3.0	3.0	3.3	2.9
	$T_d - T_i$	-.4	.3	-.3	.3	.0	-1.0	-.3	-.3
Expertise (Qualified)	$T_i$	3.5	4.1	3.9	4.4	3.0	3.7	3.1	3.9
	$T_d$	3.1	3.0	3.1	3.7	2.7	3.3	2.9	3.9
	$T_d - T_i$	-.4	-1.1	-.7	-.7	-.3	-.4	-.3	.0
Congruence (Expected)	$T_i$	3.0	4.4	2.7	3.7	2.7	3.7	2.9	3.4
	$T_d$	2.7	3.0	2.9	2.6	2.6	3.9	2.4	3.3
	$T_d - T_i$	-.3	-1.4	.1	-1.1	-.1	.1	-.4	-.1

Note: Ratings were made on a five-point scale.

E-C (Expertise-Congruence)

J (Janitor)

P (Policeman)

D (Automobile Designer)

E (Ex-convict)

Table 2

Numbers of Subjects who Rated Sources on Three Credibility  
 Characteristics and Numbers of System 1 and System 2  
 Subjects who Rated Sources on Expertise at  $T_1$

Characteristic Rated	Experimental Condition	Source rated as:			$\chi^2$	df	p
		Low	Medium	High			
Prestige (Importance)	Low Prestige	7	3	18	2.1	2	>.30
	High Prestige	5	7	16			
Expertise (Qualified)	Low Expertise	7 <sup>a</sup>	7	14	6.6	2	<.05
	High Expertise	2 <sup>a</sup>	3	23			
Congruence (Expected)	Low Congruence	10	14	4	17.5	2	<.01
	High Congruence	2	7	19			
Expertise (Qualified)	System 1	3 <sup>a</sup>	2	23	6.8	2	<.05
	System 2	6 <sup>a</sup>	8	14			

<sup>a</sup>The expected cell frequencies of the four cells in the first category (source rated as low) for both cases of expertise ratings failed to equal or exceed five. They were 4.5.

However, the  $\chi^2$  from the analysis of the immediate prestige ratings was nonsignificant ( $\chi^2=2.1$ ,  $df=2$ ,  $p>.30$ ). This would indicate that the a priori selection of sources was inadequate on this dimension.

The  $\chi^2$ s from the delayed source ratings are presented in Table 3. These analyses indicated results similar to those found with the immediate ratings. Although the  $\chi^2$  was slightly below an acceptable level of confidence, boys who had been exposed to high expertise-congruence sources remained more likely to rate these communicators as being more qualified ( $\chi^2=6.0$ ,  $df=2$ ,  $p<.06$ ), and to rate their communications as being more expected from these sources ( $\chi^2=5.3$ ,  $df=2$ ,  $p<.08$ ), than boys who had heard low expertise-congruence sources. Thus, the delayed ratings on the two items involving expertise of the communicator and congruence between the communicator and his stand indicated that the ratings on these two characteristics were generally stable over the three-week time interval, and lended further support to the experimental selection of the communicator roles.

The  $\chi^2$  from the analysis of the delayed prestige ratings was again nonsignificant ( $\chi^2=.3$ ,  $df=2$ ,  $p>.80$ ).

The  $\chi^2$ s from the changes in the source ratings between the  $T_1$  and the  $T_4$  conditions are presented in Table 4. In order to satisfy the criterion that each cell have an expected frequency of five or greater, extreme categories were again combined (Edwards, 1962). Table 4 indicates one significant result.



**CONTINUED**

**1 OF 3**

Table 3

Numbers of Subjects who Rated Sources on  
Three Credibility Characteristics at  $T_d$

Characteristic Rated	Experimental Condition	Source rated as:			$\chi^2$	df	p
		Low	Medium	High			
Prestige (Importance)	Low Prestige	7	10	11	.3	2	>.80
	High Prestige	6	9	13			
Expertise (Qualified)	Low Expertise	9	11	8	6.0	2	<.06
	High Expertise	8	4	16			
Congruence (Expected)	Low Congruence	15	8	5	5.3	2	<.08
	High Congruence	9	6	13			

Table 4

Numbers of Subjects who Changed Ratings of Sources  
on Three Credibility Characteristics ( $T_d - T_i$ )

Characteristic Rated	Experimental Condition				$\chi^2$	df	p
		-	0	+			
Prestige (Importance)	Low Prestige	10	14	4	.5	2	>.70
	High Prestige	9	13	6			
Expertise (Qualified)	Low Expertise	15	8	5 <sup>a</sup>	3.6	2	>.10
	High Expertise	10	15	3 <sup>a</sup>			
Congruence (Expected)	Low Congruence	8	15	5	7.1	2	<.05
	High Congruence	17	6	5			

<sup>a</sup>The expected cell frequencies of the two cells in the third category (+ change) for the changes in expertise ratings failed to equal or exceed five. Both were 4.0.

Boys who were exposed to high expertise-congruence sources rated their communications as being less expected from these sources under the  $T_d$  condition than under the  $T_i$  condition, while boys who heard low expertise-congruence communicators exhibited little change in their ratings between the  $T_i$  and the  $T_d$  conditions ( $\chi^2=7.1$ ,  $df=2$ ,  $p<.05$ ). The  $\chi^2$ s of the changes in prestige and expertise ratings were nonsignificant.

In summary, the ratings of the communication sources supported the empirical validity and reliability of both the expertise and the congruence dimensions originally devised for the research. Under the  $T_i$  condition, conceptual system was related to ratings of expertise. With this exception, there were no significant interactions involving the ratings or the changes in ratings of prestige, expertise, or congruence and the conditions of prestige, expertise-congruence, or conceptual system under either immediate or delayed conditions of measurement.

The ratings of prestige were in general consonance with the a priori selection of the sources, but failed to provide reliable evidence that prestige of source was effectively manipulated. Consequently, the subsequent results which involve the prestige variable are considered with extreme caution.

#### Tests of Experimental Hypotheses

Hypothesis I: System 1 boys are more persuasible than system 2 boys under conditions of high prestige. Figure 1 presents the mean attitude scores for the  $T_0$ ,  $T_i$ , and  $T_d$  conditions, and Table 5 presents the mean attitude discrepancy scores for the  $T_i - T_0$

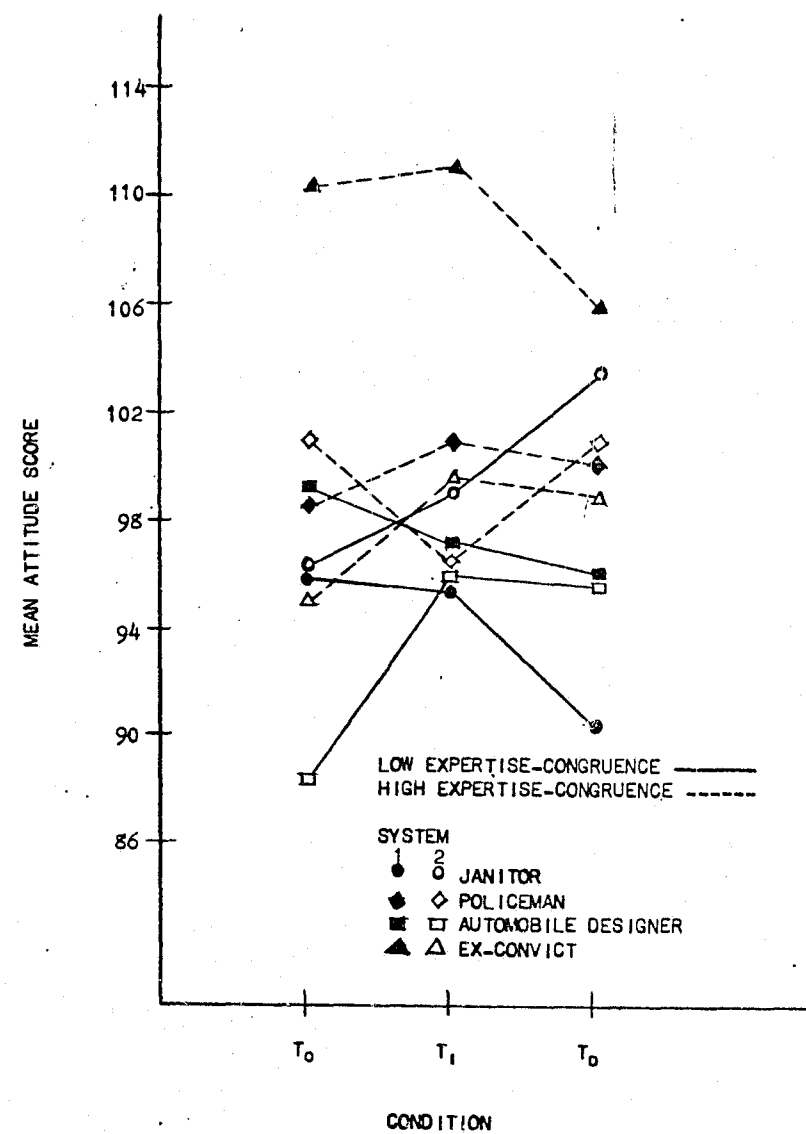


Fig. 1. Mean attitude scores for the T<sub>0</sub>, T<sub>1</sub>, and T<sub>d</sub> conditions. (The mean numerical scores are presented in Table 10 of Appendix G.)

Table 5

Mean Attitude Discrepancy Scores for  
 $T_i - T_o$  and  $T_d - T_o$  Conditions

System	Prestige	Expertise- Congruence	$T_i - T_o$	$T_d - T_o$
1	Low	Low (Janitor)	- .4	-5.0
		High (Policeman)	2.1	1.6
	High	Low (Designer)	-1.6	-2.9
		High (Ex-convict)	.6	-4.6
2	Low	Low (Janitor)	3.0	6.9
		High (Policeman)	-4.6	- .6
	High	Low (Designer)	7.9	7.3
		High (Ex-convict)	3.7	3.0

Note: Assimilation effects (persuasibility) are indicated by positive discrepancy scores; contrast (boomerang) effects by negative discrepancy scores.

and the  $T_d - T_o$  conditions. Figure 2 indicates that system 1 boys were slightly more persuasible under conditions of low prestige, whereas system 2 boys were more susceptible to social influence under conditions of high prestige (conceptual system  $\times$  prestige interaction;  $F=4.6$ ;  $df=1,48$ ;  $p<.05$ ).

Hypothesis II: Under conditions of low expertise-congruence, both groups of boys exhibit an increased acceptance of low prestige communications (the sleeper effect). Figure 3 shows that although system 2 boys exhibited a somewhat increased acceptance of the low prestige communication, system 1 boys did not; hence the sleeper effect was not found under conditions of low expertise-congruence for both groups of boys (conceptual system  $\times$  prestige  $\times$  expertise-congruence  $\times$  time interaction;  $F=1.1$ ;  $df=1,48$ ;  $p>.25$ ).

Hypothesis III: Under conditions of high expertise-congruence, neither group of boys exhibit an increased acceptance of low prestige communications (no sleeper effect). Figure 4 indicates that while system 1 boys did not exhibit an increased acceptance of the low prestige communication, system 2 boys did show an increased acceptance of this communication (but probably a regression effect) under conditions of high expertise-congruence (conceptual system  $\times$  prestige  $\times$  expertise-congruence  $\times$  time interaction;  $F=1.1$ ;  $df=1,48$ ;  $p>.25$ ).

In summary, the results did not support Hypotheses I and II, but were consonant with Hypothesis III.

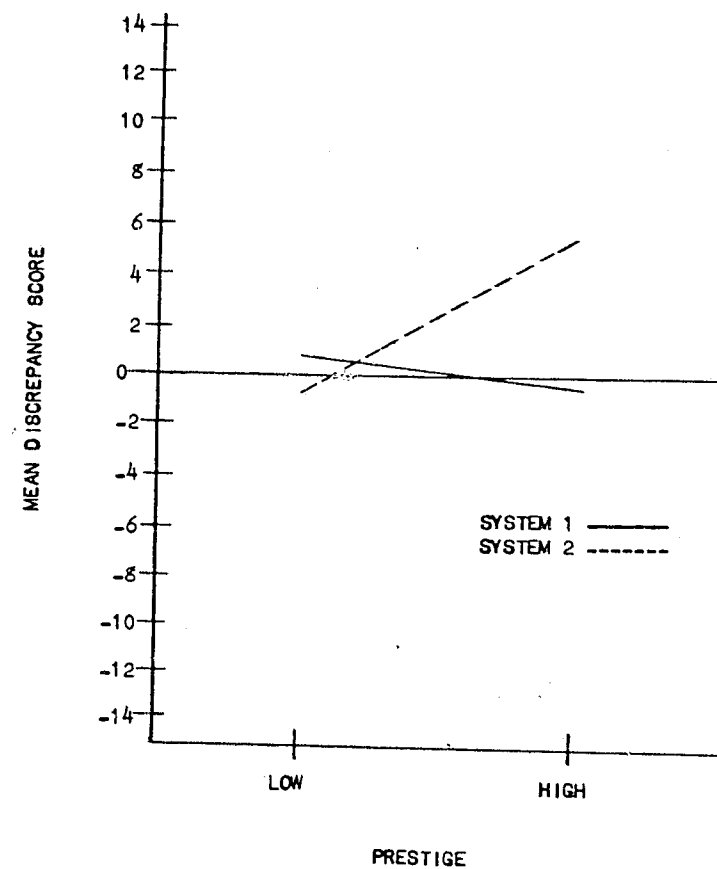


Fig. 2. Mean attitude discrepancy scores for the  $T_1 - T_2$  condition (conceptual system  $\times$  prestige interaction,  $p < .05$ ).



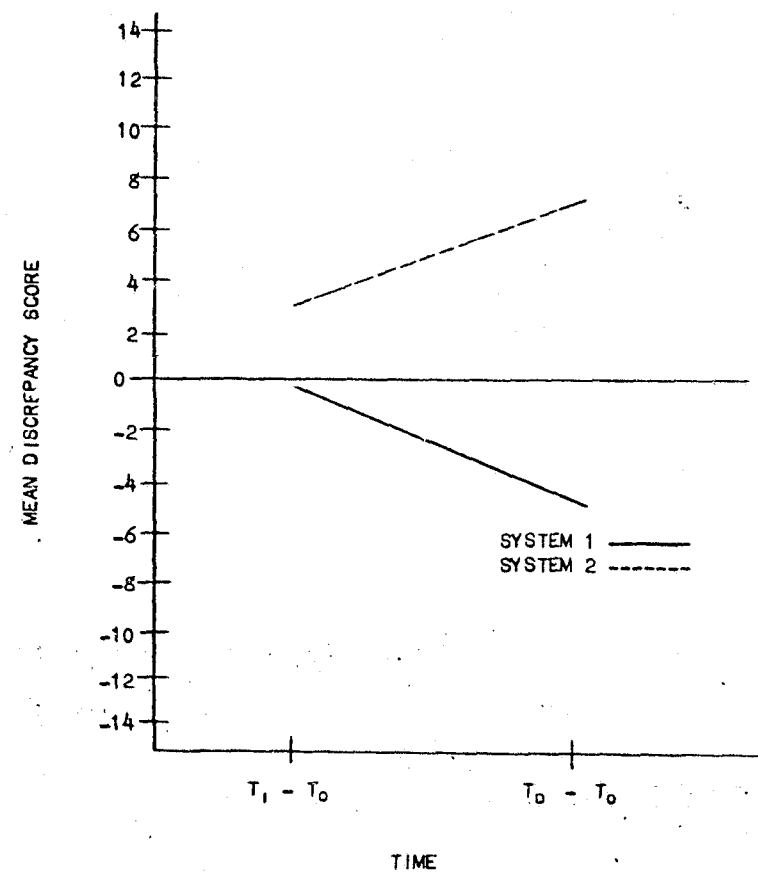


Fig. 3. Mean attitude discrepancy scores for low prestige and low expertise-congruence conditions (conceptual system x prestige x expertise-congruence x time interaction,  $p > .25$ ).

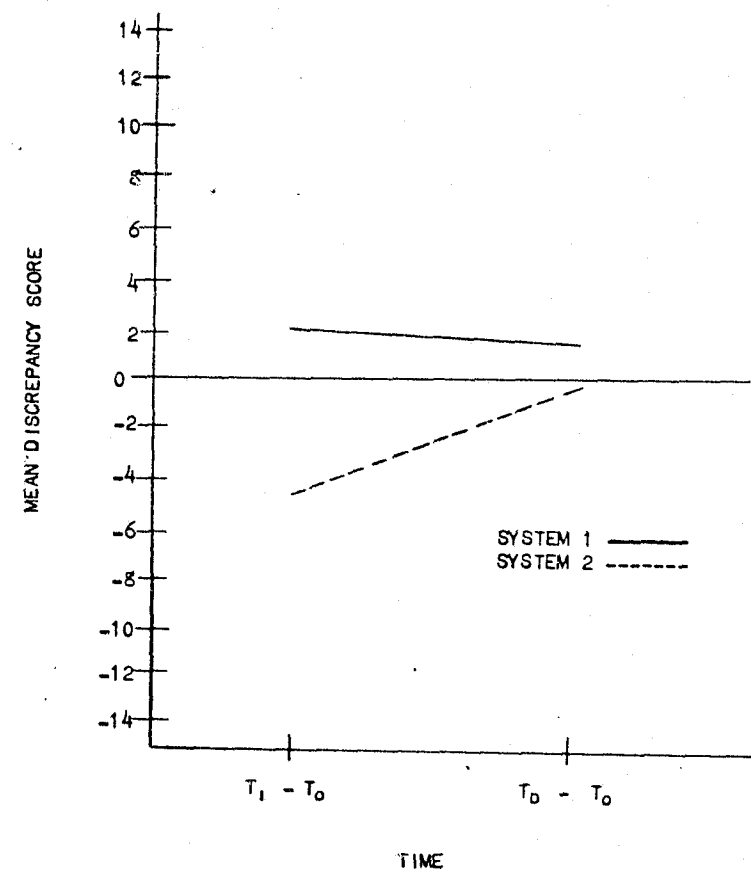


Fig. 4. Mean attitude discrepancy scores for low prestige and high expertise-congruence conditions (conceptual system x prestige x expertise-congruence x time interaction,  $p < .25$ ).

### Immediate Effects of Expertise-Congruence

Although no hypotheses were drawn regarding differential susceptibility to social influence of the different conceptual systems in response to expertise and congruence, Figure 5 indicates that system 2 boys were more persuasible under conditions of low expertise-congruence, while system 1 boys were more persuasible under conditions of high expertise-congruence (conceptual system x expertise-congruence interaction;  $F=4.9$ ;  $df=1,48$ ;  $p<.05$ ).

Although system 2 boys initially showed a slightly more unfavorable opinion toward the juvenile court and detention than system 1 boys (see Table 10 in Appendix G for the means of the  $T_0$  condition), the  $t$  between means was not significant ( $t=.2$ ,  $df=54$ ,  $p>.80$ ).

### Delayed Effects of Conceptual System and Expertise-Congruence

Figure 6 shows that although system 2 boys were slightly more persuasible than system 1 boys immediately after hearing the communication ( $T_1 - T_0$ ), system 2 boys exhibited an increase, whereas system 1 boys showed a decrease (a contrast effect), in opinion change over time ( $T_d - T_0$ ) (conceptual system x time interaction;  $F=6.4$ ;  $df=1,48$ ;  $p<.05$ ).

Figure 7 indicates that system 2 boys were more susceptible to social influence under conditions of low expertise-congruence, while system 1 boys were less resistant to social influence (but exhibited a slight contrast effect) under conditions of high

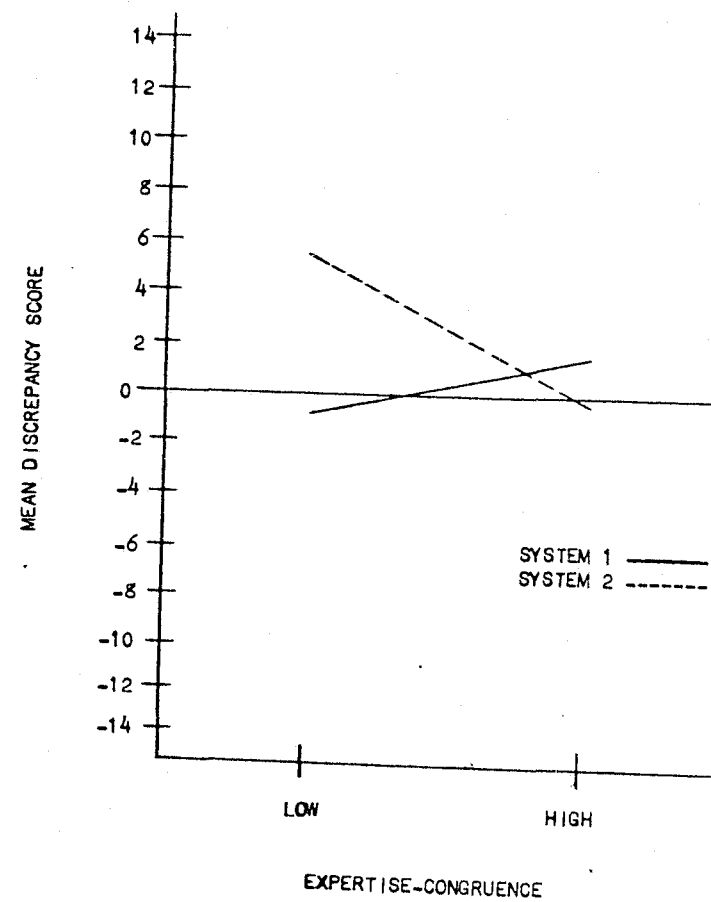


Fig. 5. Mean attitude discrepancy scores for the  $T_1 - T_0$  condition (conceptual system  $\times$  expertise-congruence interaction,  $p < .05$ )

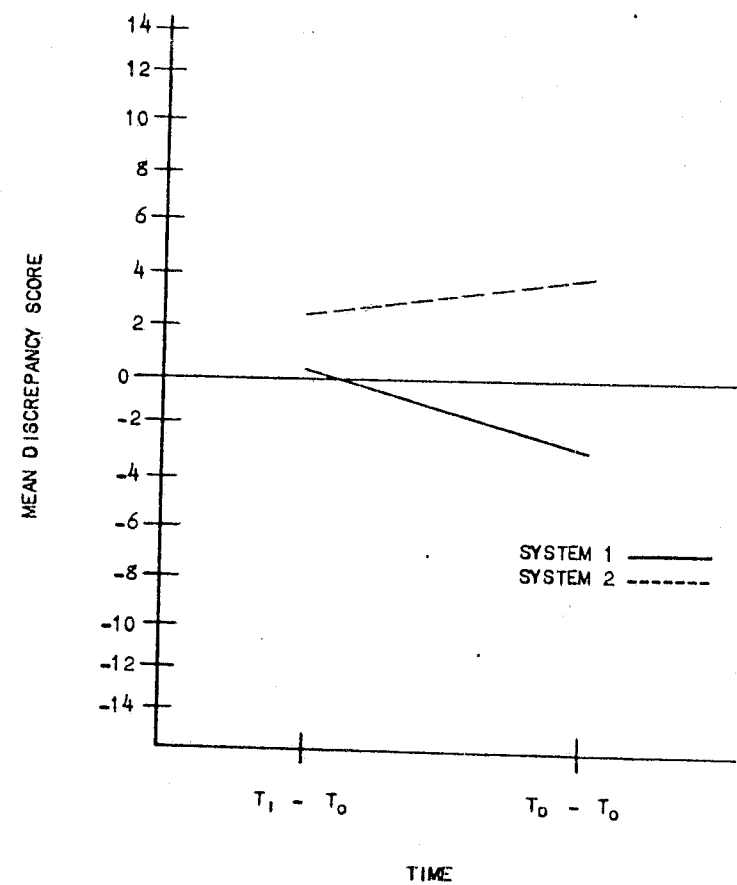


Fig. 6. Mean attitude discrepancy scores (conceptual system x time interaction,  $p < .05$ ).

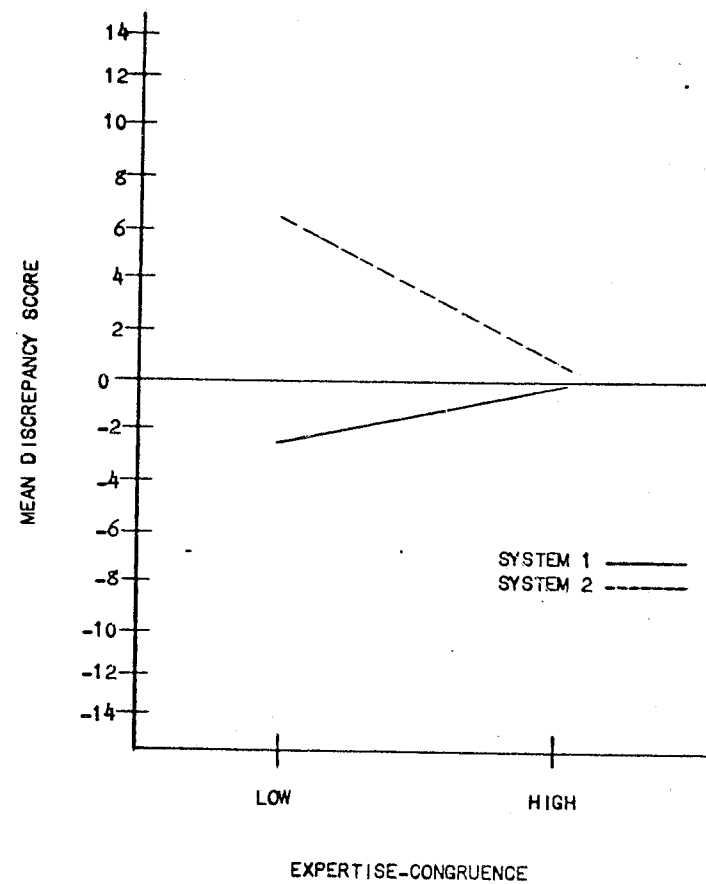


Fig. 7. Mean attitude discrepancy scores for the combined  $T_i - T_o$  and  $T_d - T_o$  conditions (conceptual system x expertise-congruence interaction,  $p < .05$ ).

expertise-congruence for the combined  $T_1 - T_0$  and  $T_d - T_0$  conditions (conceptual system  $\times$  expertise-congruence interaction;  $F=5.9$ ;  $df=1,48$ ;  $p<.05$ ). This interaction was significant in all experimental analyses.

All of the previous attitude discrepancy scores were analyzed by analysis of variance (ANOVA). The analysis for the combined  $T_1 - T_0$  and  $T_d - T_0$  conditions is presented in Table 6, and the separate analyses of the  $T_1 - T_0$  condition and the  $T_d - T_0$  condition are presented in Tables 7 and 8, respectively.

#### Recall of Communication Sources

The results of the  $\chi^2$  analyses of the immediate and the delayed recall data are presented in Table 9. When boys were asked to recall absolutely the source immediately after hearing the source ( $T_1$ ), those boys who heard high expertise-congruence sources were able to recall the name or the occupation of the communicator more frequently than boys who were exposed to low expertise-congruence sources ( $\chi^2=7.2$ ,  $df=2$ ,  $p<.05$ ). Under the delayed condition ( $T_d$ ), boys who had been exposed to high expertise-congruence communicators were again able to recall absolutely the name or the occupation of the source more often than boys who had heard low expertise-congruence sources ( $\chi^2=9.4$ ,  $df=2$ ,  $p<.01$ ). Similarly, under the delayed condition ( $T_d$ ), boys who had heard high expertise-congruence sources were able to recall relatively the name or the occupation of the communicator more frequently than boys who had been exposed to low expertise-congruence sources ( $\chi^2=9.9$ ,  $df=1$ ,  $p<.01$ ).

Table 6

Analysis of Variance of Total  
Discrepancy Scores

Source	df	MS	F
Between <u>Ss</u>	55		
Conceptual System (S)	1	589.7	7.2**
Prestige (P)	1	47.6	.6
Expertise-Congruence (E-C)	1	84.0	1.0
S x P	1	249.0	3.1
S x E-C	1	476.4	5.9*
P x E-C	1	2.0	.0
S x P x E-C	1	102.2	1.3
Error ( <u>Ss</u> /Groups)	48	81.4	
Within <u>Ss</u>	56		
Time ( $T_1 - T_0$ , $T_d - T_0$ ) (T)	1	10.9	.5
S x T	1	144.0	6.4*
P x T	1	47.6	2.1
E-C x T	1	.0	.0
S x P x T	1	27.0	1.2
S x E-C x T	1	.0	.0
P x E-C x T	1	29.0	1.3
S x P x E-C x T	1	25.1	1.1
Error (T x <u>Ss</u> /Groups)	48	22.6	
Total	111		

Levels of significance

\* $p < .05$

\*\* $p < .01$



Table 7

Analysis of Variance of Total Discrepancy  
Scores of the  $T_1 - T_0$  Condition

Source	df	MS	F
Conceptual System (S)	1	75.4	1.6
Prestige (P)	1	95.2	2.0
Expertise-Gongruence (E-G)	1	42.9	.9
S x P	1	220.0	4.6*
S x E-G	1	236.2	4.9*
P x E-G	1	7.9	.2
S x P x E-G	1	13.0	.3
Error ( $S_s$ /Groups)	48	48.0	
Total	55		

Level of significance

\* $p < .05$

Table 8

Analysis of Variance of Total Discrepancy  
Scores of the  $T_d - T_o$  Condition

Source	df	MS	F
Conceptual System (S)	1	658.3	11.7**
Prestige (P)	1	.0	.0
Expertise-Congruence (E-C)	1	41.1	.7
S x P	1	56.0	1.0
S x E-C	1	240.3	4.3*
P x E-C	1	23.1	.4
S x P x E-C	1	114.3	2.0
Error ( <u>Ss</u> /Groups)	48	56.1	
Total	55		

Levels of significance

\* $p < .05$

\*\* $p < .01$

Table 9

Numbers of Subjects who Recalled Name (N) or Occupation (O)  
of Sources under Conditions of Low and High  
Expertise-Congruence at  $T_1$  and  $T_d$

Measure	Expertise- Congruence	Subject recalled:			$\chi^2$	df	p
		-	N or O	N and O			
Absolute Recall ( $T_1$ )	Low	7	12	9	7.2	2	<.05
	High	3	6	19			
Absolute Recall ( $T_d$ )	Low	12	13	3	9.4	2	<.01
	High	4	12	12			
Relative Recall ( $T_d$ )	Low	15	—	13	9.9 <sup>a</sup>	1	<.01
	High	3	—	25			

<sup>a</sup>Corrected for continuity (Yates, 1934).

Thus, the results of the recall data consistently indicated that boys were able to recall the name or the occupation of the source under conditions of high expertise-congruence more frequently than under conditions of low expertise-congruence. Since the pairs of names and occupations were selected randomly and consisted of comparable or equal frequencies of syllables for low and high expertise-congruence conditions, it was unlikely that certain pairs of names and occupations were easier to recall. Neither immediate nor delayed recall was significantly related to conceptual system or prestige conditions.

## CHAPTER IV

### DISCUSSION

The results failed to support Hypotheses I and II, but were consonant with Hypothesis III. It is interesting to note that the findings relevant to Hypotheses I and II were in the directions opposite to those predicted. System 1 boys were not immediately more persuasible than system 2 boys under conditions of high source prestige. On the contrary, system 2 boys were significantly more persuasible than system 1 boys under these conditions. This result refuted Hypothesis I.

Although system 2 boys tended to show the sleeper effect (increased acceptance of the low prestige communication) under conditions of low expertise-congruence, system 1 boys did not. Under conditions of high expertise-congruence, neither group of boys exhibited the sleeper effect. Thus, Hypothesis II failed, but Hypothesis III was supported.

In view of the failure to demonstrate the effective manipulation of the variable labelled "prestige," as well as the involvement of this variable in the hypotheses, it is possible that the results relevant to Hypotheses I and II largely reflected this unsuccessful manipulation. In the following discussion, all findings which involved prestige of source are largely discounted.

The Problem of Prestige within the Conceptual Systems Framework

The results of the prestige ratings in this research indicated that low and high prestige communicators were not significantly differentiated in terms of importance. Although the term importance was considered to be comparable to prestige, the specification and measurement of this variable appears to be a complex problem. Such complexity is reflected by the different concepts which have been used to specify prestige of source by social-psychological investigators (Hovland & Weiss, 1951-52; Watts & McGuire, 1964), e. g., status, trustworthiness, and "positive" attributes of the source.

During the initial stages of this research, the prestige dimension was considered to be a central variable. The decision to employ it was based upon both its probable relevance to the conceptual systems and its relationship to the sleeper effect. Although previous research has indicated its relationship to the sleeper effect (Hovland et al., 1949; Hovland & Weiss, 1951-52; Kelman & Hovland, 1953), its relevance for the conceptual systems sampled in this investigation is somewhat questionable.

Harvey and his colleagues employ the concept of authority in their descriptions of system 1 and system 2 functioning. It seems doubtful that the concept of prestige is synonymous, or even directly comparable, to the concept of authority. For example, Fidel Castro is likely to occupy a position of high authority, but yet be viewed as being relatively low on the

dimension of prestige, for most Cuban refugees. Thus, authority would appear to refer to a dimension of power, while prestige appears to refer primarily to such dimensions as status and importance. Although the policeman was representative of high authority in the sense of power, it was unlikely that any of the other sources (the janitor, the automobile designer, or the ex-convict) were.

The research has implications for future investigations attempting to use prestige as an independent variable. Although the credibility ratings were in the predicted direction (non-significant) for low and high prestige communicators, they suggest that system 1 and system 2 boys require different sources for the effective representation of low and high prestige communicators. As Schweitzer and Ginsburg (1966) have suggested, the audience's attribution of credibility to a source is complex and based upon many factors. Even if the researcher prefers to employ different sources for different groups, he will probably have difficulty in maintaining adequate experimental control unless he can demonstrate that the different communicators are comparable in terms of low or high prestige levels. Thus, the use of the prestige dimension in a research design involving groups which are likely to differ in their response to prestige levels should receive substantial pre-experimental consideration.

### Susceptibility to Social Influence

Although the hypothesis relevant to the immediate effects of social influence was not supported, there was one result which has important implications for susceptibility to social influence in delinquent boys. The results indicated the following significant interactions: (1) system 2 boys were more susceptible to social influence under conditions of high source prestige, while system 1 boys were slightly more persuasible under conditions of low source prestige; and (2) system 2 boys were more persuasible under conditions of low expertise-congruence, while system 1 boys were more susceptible to social influence under conditions of high expertise-congruence. Since the prestige variable was not effectively manipulated, however, the former interaction was discounted.

As a consequence of the latter result, it is reasonable to propose the following general statement: system 2 boys are more susceptible to social influence under conditions in which the communicator is unqualified and delivers a message which is unexpected in terms of his background, while system 1 boys are more persuasible under conditions in which the source is qualified and delivers a communication which is expected on the basis of his background. An examination of Table 5 ( $T_i - T_o$  condition) indicates that the groups of system 2 boys who heard the automobile designer or the janitor were more persuasible than the groups who were exposed to the policeman or the ex-convict. In contrast,



the groups of system 1 boys who were exposed to the policeman or the ex-convict were more susceptible to social influence than the groups who heard the automobile designer or the janitor. Since the ratings of both expertise and congruence supported the experimental selection of the communicator roles on these dimensions, the previous conclusion is rather well substantiated. However, an examination of Table 10 (Appendix G) indicates that the initial mean ( $T_0$ ) for system 2 boys who heard the automobile designer was relatively low. If statistical regression effects were present, it is possible that this group of system 2 boys were more likely to show positive attitude change. Thus, it is possible that regression effects contributed to the susceptibility of system 2 boys to low expertise-congruence influence.

Although Harvey, Hunt, and Schroder's (1961) conceptual framework has been used to classify delinquent boys (Juers & Harvey, 1964), the present investigation was the first to employ the Conceptual Systems Test (CST) for this purpose. Furthermore, this research represented an initial attempt to consider delinquent behavior in terms of this conceptual framework within an experimental setting. Since this framework and, in particular, the CST evolved primarily from and are based largely upon normal samples, its application to delinquents is still open to question.

However, the results of this investigation appear to lend some support to the distinction between system 1 and system 2 individuals proposed by Harvey and his associates. First of all,

there were rather consistent significant differences between system 1 and system 2 boys, even though these differences were generally not in the predicted direction. Secondly, consider the following result: system 1 boys were most susceptible to social influence when they were exposed to the policeman, while system 2 boys were most persuasible when they heard the automobile designer (see Table 5). Furthermore, system 1 boys were most resistant to social influence (and exhibited a contrast, or boomerang, effect) when they heard the automobile designer, while system 2 boys were most resistant to social influence (and exhibited a contrast effect) when they were exposed to the policeman. In terms of Harvey, Hunt, and Schroder's (1961) description of system 1 functioning, these persons are most dependent upon authority figures. It seems quite reasonable to argue that the policeman in the experiment represented such a figure for delinquent boys. On the other hand, system 2 boys are depicted as being distrustful of authority-related cues (Harvey et al., 1961). Therefore, their resistance to the communication delivered by the policeman, as well as their susceptibility to social influence when they were exposed to the automobile designer, support the description of system 2 functioning.

Finally, it is interesting to note the following observation. When boys were being selected for the research, it was observed that system 1 boys tended to be considered for release from the

Institution more frequently than system 2 boys. Thus, the results of the investigation provided evidence which supports the conceptual framework advanced by Harvey and his colleagues (1961).

Retention of Opinion Change and the Sleeper Effect

Although the hypothesis relevant to the occurrence of the sleeper effect was not supported, system 2 boys did exhibit an increased acceptance of low prestige communications under conditions of low expertise-congruence (the sleeper effect). Thus, system 2 boys not only were immediately more persuasive under conditions of low expertise-congruence, but also tended to show the sleeper effect under these conditions. Although system 1 boys were more susceptible to social influence under conditions of high expertise-congruence, they did not exhibit the sleeper effect under these conditions. This difference between the two conceptual systems probably reflects their differential responsiveness immediately and over time to the relatively low levels of authority sampled in the investigation. Since prestige of source was not effectively manipulated, however, the trend for the occurrence of the sleeper effect is questionable.

With respect to retention of opinion change, there were two other results which have important implications for the permanency of attitude change in delinquent boys. Although system 2 boys were initially more persuasive than system 1

boys ( $T_1 - T_0$  condition), they became significantly more persuasible during the three-week time interval ( $T_d - T_0$  condition). Furthermore, system 1 boys became increasingly more resistant to social influence and exhibited a contrast, or boomerang, effect over time. Secondly, system 2 boys were more persuasible under conditions of low expertise-congruence, while system 1 boys were less resistant to social influence (but exhibited a slight contrast effect) under conditions of high expertise-congruence. This result was the most consistent finding of the investigation, and was discussed previously in the section concerning the susceptibility to social influence.

An examination of the data concerning the increasing disparity in persuasibility between system 1 and system 2 boys over time indicated the following: system 1 boys exhibited a substantial contrast effect, whereas system 2 boys showed a slight increment in the degree of opinion change. This finding seems best interpreted in terms of the probable authority-related cues of the sources which were discussed previously. It seems highly likely that three of the four sources employed in this research (the janitor, the automobile designer, and the ex-convict) were relatively low on the dimension of authority in terms of the attitudes of delinquent boys toward legal agencies. As a consequence, it was likely that only one communicator (the policeman) was perceived as being relatively high on the continuum of authority. Thus, after the three-week time interval, system 1 boys were most persuasible when they had been exposed to the

policeman; whereas system 2 boys were most resistant to social influence when they had initially heard this source (see Table 5). Furthermore, system 1 boys were more resistant to social influence when they had initially heard the janitor, the automobile designer, or the ex-convict; system 2 boys were more persuasible when they had been exposed to any of these three sources. Although this discussion sheds some light upon the difference between system 1 and system 2 boys under the delayed condition ( $T_d - T_0$ ), it does not fully account for the increase in disparity between these two groups over time.

In order to account for this increasing difference over time, it seems necessary to propose a relationship between response to authority and temporality. This relationship would involve assimilation and contrast effects, as well as a summation of these effects over time. Thus, the immediate responses to varying levels of authority would be accentuated with time.

System 2 boys were immediately more persuasible, while system 1 boys were immediately less susceptible to social influence ( $T_1 - T_0$ ). This finding (statistically unreliable) can be interpreted in terms of the relatively low levels of authority which were probably represented by the majority of sources in the research. Thus, while system 2 boys exhibited a moderate assimilation effect, system 1 boys showed only a minimal assimilation effect. After three weeks, however, system 2 boys showed an increased assimilation effect; whereas system 1 boys exhibited a substantial contrast effect.

It is rather puzzling why system 1 boys exhibited a greater change (contrast effect) than system 2 boys (assimilation effect) over time. If such a summative principle is operative over time, the results of this interaction suggest that it has a greater effect upon persons who initially exhibit minimal assimilation effects.

The result relevant to the occurrence of the sleeper effect revealed a trend in the direction hypothesized for system 2 boys. This finding, although not reliable, indicates that source expertise and congruence between the source and the stand operate in the predicted direction to produce the sleeper effect for system 2 boys. Although previous research (Hovland & Weiss, 1951-52; Kelman & Hovland, 1953) suggests that these variables are related to the sleeper effect, the results of this investigation did not support such an assumption for system 1 boys.

A further assumption of this research was that delinquent boys who are able to recall the source should fail to show the sleeper effect. The findings indicated that both system 1 and system 2 boys who heard high expertise-congruence sources were better able to recall the source, and that neither group of boys exhibited the sleeper effect under these conditions. Thus, the results generally support this assumption.

It was also assumed implicitly in the investigation that prestige ratings would change in consonance with any sleeper effect which occurred. However, there were no significant interactions between changes in ratings of importance and

expertise-congruence conditions. In view of the ineffective manipulation of the prestige variable, however, such potential changes in ratings of importance were not likely to be found.

Research investigating the sleeper effect has primarily involved normal samples. As a result, it is possible that this phenomenon is specific to attitude change in relatively normal populations, at least under the conditions initially hypothesized. Juvenile delinquents, as a group, may exhibit greater resistance to usual social influence procedures than normal subjects. Furthermore, most demonstrations of the sleeper effect have shown positive initial attitude change, but this research failed to show such immediate overall positive changes. Such resistance to social influence was accentuated for boys under high expertise-congruence conditions. A finding which has some relevance for this interpretation can be observed in the ratings of importance (prestige). There was a trend for boys who heard high expertise-congruence sources to rate them as lower in importance than boys who were exposed to low expertise-congruence communicators. Thus, high expertise-congruence sources may have produced resistance to social influence over time.

Finally, in retrospect, it is possible that the present research design was not an adequate test of the primary hypothesis advanced to account for the sleeper effect. Hovland and his colleagues indicated that if the source and his stand are not closely associated (low congruence), the sleeper effect should occur. In their demonstrations of the phenomenon, however, these

investigators have usually equated prestige with trustworthiness of the source. It is plausible to argue that trustworthiness also refers to the variable of expertise, e. g., the trustworthiness of a communicator may be based upon his qualifications to express his stand on an issue. Thus, it is possible that Hovland and his associates were actually equating prestige with expertise to some extent. Since the present investigation varied expertise and congruence simultaneously, the degree of congruence between the source and his stand may have been confounded by the expertise variable. In defense of the research, however, it should be recognized that it was extremely difficult to select communicators who varied independently in expertise and congruence under the specific conditions of the experiment. For example, the policeman (high expertise) could not have advocated an unfavorable position toward the legal agencies (low congruence) because of certain practical and ethical problems.

The Dissimilarity between Degree of Persuasibility and Credibility Ratings

Although the supplemental items measuring the credibility characteristics of the four sources in the various conditions of prestige and expertise-congruence were generally consonant with the experimental selection of these specific sources and it was observed that the communicators appeared to be "believable" for most boys, there were some discrepancies evident between the immediate ratings of the sources under various conditions and



the degree of persuasibility under different conditions (see Tables 1 and 5). For example, system 1 boys rated the automobile designer as highest in importance immediately after his communication, but were most persuasible when they heard the policeman, who they rated as lowest in importance. In contrast, system 2 boys rated the policeman as highest in importance immediately following his communication, but were most susceptible to social influence when they heard the automobile designer.

Another inconsistency involved the ineffective manipulation of prestige and the significant interaction between conceptual system and prestige under immediate conditions. System 2 boys were more persuasible under the conditions specified as "high prestige," while system 1 boys were more persuasible under the conditions labelled "low prestige." Since prestige, or importance, of source was not successfully manipulated, however, it is difficult to identify the exact source of variation with respect to opinion change. An examination of Table 10 (Appendix G) indicates that the initial means ( $T_0$ ) for system 1 boys who heard the ex-convict and for system 2 boys who heard the automobile designer were relatively high and low, respectively. If regression effects were operative for this group of system 2 boys and the initial mean for this group of system 1 boys represented a relative upper limit for potential change, it is possible that the initial discrepancy between the two groups contributed to this interaction.

If, as Schweitzer and Ginsburg (1966) have suggested, other factors are involved in source credibility, the ratings of expertise and congruence should be related to persuasibility. Both system 1 and system 2 boys rated the ex-convict as highest in expertise, but neither group of boys was most persuasible when they heard this source ( $T_1$ ). System 2 boys rated the policeman as highest in congruence, but were most resistant to his communication. This latter finding is likely a consequence of the distrust of authority figures which is considered to be a behavioral feature of system 2 functioning. Another discrepancy between the degree of persuasibility and the credibility ratings is evident in the results of the relative changes in source ratings. Boys who were exposed to high expertise-congruence communicators rated their communications as being less expected from these sources under the delayed condition ( $T_d$ ) than under the immediate condition ( $T_1$ ), while boys who heard low expertise-congruence sources exhibited little change between the two conditions. The former result possibly reflects regression effects. However, there was no significant result or trend which indicated differential susceptibility to social influence for boys under high expertise-congruence conditions over time (see the nonsignificant expertise-congruence x time interaction of Table 6).

With respect to the ratings of high expertise-congruence communicators, it is important to note certain problems involved with one of these sources. Although the policeman can be

considered to have delivered a communication which was highly expected on the basis of his background, it is doubtful that the message delivered by the ex-convict was as highly expected. More specifically, it is possible that the ex-convict actually represented two contradictory positions. For ethical and practical reasons, it was necessary to have this source advocate a favorable position toward the legal agencies. Thus, the communicator was presented as an ex-convict on parole in order to produce as high a degree of congruence as possible. On the other hand, it is possible that many delinquent boys perceived his stand as rather unexpected because of his previous criminal background.

As a result, many boys may have doubted that the ex-convict said what he really believed, e. g., that he was phony. If this reasoning is correct, such superficial congruence may have contributed to the lowered congruence ratings at  $T_d$  (see Tables 1 and 4), as well as to the reduced susceptibility to social influence (see Fig. 5), of boys who heard high expertise-congruence sources. Furthermore, since system 2 persons are described as being distrustful, it is possible that their resistance to social influence (the contrast, or boomerang, effect) under conditions of high expertise-congruence was a joint consequence of their perception of the ex-convict as being somewhat phony and their anti-authority reaction to the policeman (see Fig. 5). In connection with this interpretation regarding system 2 boys, it

is likely that their inclination to be distrustful also resulted in their lower immediate ratings of expertise than system 1 boys.

Although the dissimilarities between the degree of opinion change and the ratings of credibility characteristics present a complex problem, it seems plausible to make the following interpretation. First of all, it is reasonable to argue that both opinions toward legal agencies and credibility ratings can be viewed as attitudes toward one or more objects in the environment. However, if these opinions and credibility ratings are conceptualized on a continuum ranging from covert to overt behavior, it is plausible to assume that opinions toward legal agencies represent more covert (or subtle) behavioral responses while credibility ratings are representative of more overt behavioral responses. Furthermore, the credibility ratings involve opinions about people; whereas attitudes toward legal agencies concern opinions toward more impersonal environmental objects.

Extending this interpretation, it seems likely that overt behavioral responses are more subject to defensive and self-protective strategies than covert responses. One such strategy is a tendency to respond in a socially desirable manner (Edwards, 1957). Thus, it seems plausible to argue that the credibility ratings were representative of more overt behavioral responses; and, therefore, more subject to a socially desirable response set. This interpretation seems particularly relevant to the

ineffective manipulation of the prestige variable. If the ratings of importance are considered to refer to characteristics of a person, while expertise and congruence ratings refer to characteristics of both a person and his message, it is reasonable to argue that the ratings of importance (prestige) were especially vulnerable to a socially desirable response set.

On the other hand, it is possible that opinions toward the legal agencies were also somewhat subject to a socially desirable response set. Since two of the three credibility ratings supported the experimental selection of sources, perhaps the opinions toward the juvenile court and detention were influenced by the social desirability variable. If such a "bias" were operative, it would be most clearly observed in the results of the initial questionnaire administration ( $T_0$ ). The initial attitudes toward the two legal agencies varied as a function of conceptual system: system 1 boys exhibited a neutral opinion, while system 2 boys showed a slightly unfavorable opinion, toward these agencies. However, the difference was statistically unreliable.

This finding also indicates that the sample of delinquent boys employed in the research were not ego-involved to as great an extent as was originally anticipated. In view of their rather neutral opinions toward the legal agencies, these boys, as a group, were more susceptible to social influence than if they had held more unfavorable opinions. Such an assumption is based

upon the general conclusion that ego-involvement and attitude change are negatively correlated (Sherif & Hovland, 1961). Furthermore, system 1 boys should have been slightly more persuasible than system 2 boys because of their more neutral initial opinions. If the social desirability variable contributed to the initial stand, however, the opinions exhibited by system 1 boys probably reflected a greater degree of public, rather than private, commitment to their position.

#### Implications for the Rehabilitation of Juvenile Delinquents

The results of this research, as well as the previous discussion, suggest several implications for the treatment of delinquents. The findings indicated, as previous research has suggested (Hewitt & Jenkins, 1946; Hurwitz, 1965; Quay, 1964), that delinquents are a heterogeneous lot. As a consequence, the rehabilitation of juvenile delinquents should involve more than one treatment approach.

Juergs and Harvey (1964), who have reported the only previous research concerning the application of the conceptual framework advanced by Harvey and his colleagues to delinquency, have provided general information regarding the rehabilitation of delinquent boys. These investigators, employing a survey approach, reported that while system 2 boys comprised nearly 50 per cent of the boys who had been committed only once, they accounted for 65 per cent of all the recidivists in their sample. The latter finding is in agreement with the description of system 2 individuals in that

they distrust and act against authority-related cues, i. e., the socio-legal norms of society. Since these researchers indicated that approximately 80 per cent of all delinquents could be classified as either system 1 or system 2, the former result could be interpreted as suggesting that system 2 boys are more likely to be retained in the institution for longer periods of time than system 1 boys. This interpretation is consonant with the observation of this research that system 2 boys were less frequently considered for release than system 1 boys.

These investigators have proposed general guidelines for differential approaches in the rehabilitation of system 1 and system 2 delinquents (Juers & Harvey, 1964). Although system 1 boys are dependent upon and seek the high degree of structure, order, and adherence to rules which are demanded by most institutional facilities of this type, system 2 boys rebel against and defy such a high degree of structure and behavioral control. As a consequence, Juers and Harvey have suggested that a rehabilitative approach which provides general behavioral limits, but which also facilitates individual movement, freedom, and some degree of autonomy would be most effective for system 2 boys.

With respect to more specific rehabilitative approaches, the findings of the present research indicate that system 1 boys would be most amenable to treatment under conditions in which rehabilitation and supervision are presented in an atmosphere of high institutional authority. Institutional authority, in this case, refers to authority as represented by the staff at a

particular institutional facility. In contrast, system 2 boys would be most amenable to treatment under conditions in which supervision and rehabilitation are provided in a setting of low institutional authority. Such a procedure would involve the utilization of staff which have relatively little association with institutional authority. For example, lay volunteers would appear to be especially effective as resources for system 2 boys. On the other hand, it may be profitable to facilitate more pro-social methods of rebelling against authority for system 2 boys. It is important to note that the rehabilitative procedures proposed here refer to the characteristics of current or potential staff involved in the treatment of delinquent boys, rather than to the particular goals of treatment. In other words, these findings have implications for the general form, rather than the specific content, of rehabilitation.

The results of this research, as well as the theoretical notions advanced by Harvey et al. (1961) concerning the conceptual systems, also have implications for release and placement of delinquent boys. In general, system 1 boys should be better candidates for release than system 2 boys. In view of the previous observation that system 1 boys were more often considered for release than system 2 boys at the Utah State Industrial School, such a procedure may already be ostensibly in effect at this particular facility. Thus, system 2 boys seem to represent a greater risk for release. This conclusion is supported by the



higher recidivism rate among system 2 boys found by Juers and Harvey (1964). It is important to note that the argument for the release of system 1 boys could also be based upon the likelihood that these boys become more dependent upon the institutional authority of the facility. Thus, system 1 boys are likely to become "institutionalized" if they are retained for an extended period of time in the institution.

With regard to placement upon release from the institution, approaches similar to those discussed in connection with rehabilitation within the institution would seem to be most effective. Placements, such as foster or group homes, should provide rehabilitative supervision which is offered in an atmosphere of high structure and socio-legal authority for system 1 boys. In contrast, system 2 boys should profit more from a setting of minimal authority, but which, nevertheless, provides for some degree of autonomy, personal freedom, and movement. Since many boys return to their natural homes upon release, rehabilitative procedures for these boys may need to involve some degree of counseling with parents in order to facilitate appropriate forms of rehabilitation.

#### Implications for Future Research

The results of this investigation suggest several alternatives for future research. First of all, it would be highly desirable to compare juvenile delinquents with non-delinquents. Such a comparative study seems indicated in order to ascertain possible

differences between these two populations in terms of conceptual system, opinion change, and retention of opinion change. For example, a demonstration of the sleeper effect in both groups may require different experimental conditions. If future research employs the particular attitudes sampled in this research (toward legal agencies), however, there are probable ethical and practical problems involved with non-delinquent samples. Since non-delinquent boys should exhibit more favorable attitudes toward these legal agencies than delinquent boys (Chapman, 1960), communication sources would be required to advocate an unfavorable position toward these agencies in order to demonstrate attitude change. However, it is unlikely that organizations within the community, e. g., the public schools, would permit the advocacy of such a position. Therefore, it may be more advantageous to consider other alternative attitude dimensions for such comparative research.

Secondly, efforts could be made to demonstrate more clearly which particular sources are most effective with each of the two conceptual systems sampled in this investigation. As discussed previously, it is likely that system 1 individuals require different communication sources than system 2 persons for optimal susceptibility to social influence. If this is the case, the experimenter will have difficulty in demonstrating that the different sources are comparable, or that they can be varied along reliable and valid dimensions. However, research which focuses upon various credibility characteristics is clearly indicated.

In view of the failure to demonstrate the sleeper effect under the conditions hypothesized, further investigation of this phenomenon is necessary. The sleeper effect has significant implications for the retention of initial attitude change. Based upon the results of this research, it would appear that the sleeper effect occurs under conditions of low expertise-congruence, but only for certain limited groups of individuals. On the other hand, it is possible that the degree of congruence between the source and his stand was confounded with the expertise variable and, thus, prevented a demonstration of the phenomenon in the present research. Therefore, various experimental variables believed to be relevant to the sleeper effect need to be isolated and manipulated in order to obtain a more complete understanding of the conditions which produce the phenomenon.

## CHAPTER V

### SUMMARY

The present investigation was concerned with two aspects of opinion change within a dichotomized delinquent population: (1) susceptibility to social influence; and (2) retention of opinion change. Based upon the conceptual framework advanced by Harvey and his colleagues (1961) and previous research investigating the sleeper effect (Hovland & Weiss, 1951-52; Kelman & Hovland, 1953), the following hypotheses were proposed:

(1) system 1 boys would be more persuasible than system 2 boys under conditions of high source prestige; (2) both groups of boys would exhibit the sleeper effect under conditions of low expertise and low congruence between the source and the stand; and (3) neither group of boys would exhibit the sleeper effect under conditions of high expertise and high congruence between the source and the stand.

Fifty-six boys from the Utah State Industrial School were classified on the basis of the Conceptual Systems Test (Harvey & Hoffmeister, 1967) as predominantly system 1 or system 2. Boys were then assigned randomly to one of four experimental conditions varying in prestige and expertise-congruence. Subsequent to responding to a questionnaire measuring attitudes toward legal agencies, boys were exposed to one of four communicators, varying in background characteristics related to prestige and expertise-congruence, who advocated a favorable position toward

these agencies. Immediately after hearing the sources, boys completed the opinion questionnaire again. Finally, boys responded to the questionnaire three weeks after hearing the communicators. In addition, boys responded to items measuring credibility characteristics and recall of the sources. Discrepancy scores comprised the primary data and were evaluated by analysis of variance. Credibility ratings were assessed in terms of chi square.

The credibility ratings indicated that the sources effectively represented the experimental selection of the expertise and congruence variables, but failed to support the selection of the prestige variable. Therefore, findings which involved the prestige dimension were largely discounted. The results failed to support Hypotheses I and II, but were consonant with Hypothesis III. Immediately after hearing the communicators, it was found that system 1 boys were more persuasible under conditions of high expertise-congruence; while system 2 boys were more persuasible under conditions of low expertise-congruence. After three weeks, system 2 boys exhibited an increased assimilation effect, while system 1 boys showed a substantial contrast effect. System 2 boys remained more persuasible under low expertise-congruence conditions, while system 1 boys were less resistant to social influence under high expertise-congruence conditions. The sleeper effect tended to occur under conditions of low expertise-congruence only for system 2 boys.

The findings were interpreted in terms of differential responsiveness to authority-related cues of the communication sources, and as generally in support of the conceptual framework advanced by Harvey and his colleagues (1961). Various limitations of the research, such as the problem of prestige, the simultaneous variation of expertise and congruence, and the social desirability variable, were discussed. Several implications were presented which relate to the rehabilitation of delinquent boys within the institution, and upon release to the community. Finally, implications for future research were considered.

#### REFERENCES

- Bennett, Edith B. Discussion, decision, commitment, and consensus in "group decision." Human Relations, 1955, 8, 251-273.
- Brodbeck, May. The role of small groups in mediating the effects of propaganda. Journal of Abnormal and Social Psychology, 1956, 52, 166-170.
- Brook, R. Personality correlates associated with differential success of affiliation with Alcoholics Anonymous. Unpublished doctoral dissertation, University of Colorado, 1962.
- Gairns, R. B. The influence of dependency anxiety on the effectiveness of secondary reinforcement. Paper presented at the Eastern Psychological Association (1960).
- Chapman, A. W. Attitudes toward legal agencies of authority for juveniles. A comparative study of one-hundred-thirty-three delinquent and one-hundred-thirty-three nondelinquent boys in Dayton, Ohio. Dissertation Abstracts, 1960, 20, No. 7.
- Cohen, A. R. Some implications of self-esteem for social influence. In C. I. Hovland & I. L. Janis (Eds.), Personality and persuasibility. New Haven: Yale University Press, 1959. Pp. 102-120.
- Crowne, D. P., & Strickland, B. R. The conditioning of verbal behavior as a function of the need for social approval. Journal of Abnormal and Social Psychology, 1961, 63, 395-401.
- Crutchfield, R. S. Conformity and character. American Psychologist, 1955, 10, 191-198.
- Edwards, A. L. The social desirability variable in personality research. New York: Dryden Press, 1957.
- Edwards, A. L. Statistical methods for the behavioral sciences. New York: Holt, Rinehart, & Winston, 1962.
- Feldman, S. Motivational aspects of attitudinal elements and their place in cognitive interaction. In S. Feldman (Ed.), Cognitive consistency: motivational antecedents and behavioral consequences. New York: Academic Press, 1966.
- Felkner, Catherine, & Harvey, O. J. Cognitive determinants of concept formation and attainment. Technical Report No. 10, Contract Nonr 1147(07), University of Colorado, 1963.
- Fine, B. J. Conclusion-drawing, communication, credibility, and anxiety as factors in opinion change. Journal of Abnormal and Social Psychology, 1957, 54, 369-374.



- Gelfand, Donna M. The influence of self-esteem on rate of conditioning and social matching behavior. Journal of Abnormal and Social Psychology, 1962, 65, 259-265.
- Gelfand, Donna M., & Winder, C. L. Operant conditioning of verbal behavior of dysthymics and hysterics. Journal of Abnormal and Social Psychology, 1961, 62, 688-689.
- Harvey, O. J. Cognitive determinants of role playing. Technical Report No. 3, Contract Nonr 1147(07), University of Colorado, 1963a.
- Harvey, O. J. Self systems, anomie, and self esteem. Technical Report No. 9, Contract Nonr 1147(07), University of Colorado, 1963b.
- Harvey, O. J. Some cognitive determinants of influencibility. Sociometry, 1964, 27, 208-221.
- Harvey, O. J. Conceptual systems and attitude change. In M. Sherif & Carolyn W. Sherif (Eds.), Attitude, ego-involvement, and change. New York: Wiley, 1967. Pp. 201-226.
- Harvey, O. J., & Hoffmeister, J. K. The Conceptual Systems Test and nine criterion factors (revised). Boulder: University of Colorado, 1967.
- Harvey, O. J., Hunt, D. E., & Schroder, H. M. Conceptual systems and personality organization. New York: Wiley, 1961.
- Heller, K. Experimental analogues of psychotherapy: the clinical relevance of laboratory findings of social influence. Journal of Nervous and Mental Diseases, 1963, 137, 420-426.
- Helson, H., Blake, R. R., & Mouton, J. S. Petition-signing as adjustment to situational and personal factors. Journal of Social Psychology, 1958, 48, 3-10.
- Hewitt, L. E., & Jenkins, R. L. Fundamental patterns of maladjustment: the dynamics of their origin. Springfield: State of Illinois, 1946.
- Hoffman, M. L. Some psychodynamic factors in compulsive conformity. Journal of Abnormal and Social Psychology, 1953, 48, 383-393.
- Hovland, C. I., Campbell, E. H., & Brock, T. The effects of "commitment" on opinion change following communication. In C. I. Hovland & I. L. Janis (Eds.), The order of presentation in persuasion. New Haven: Yale University Press, 1957. Pp. 23-32.

**CONTINUED**

**2 OF 3**

- Hovland, C. I., & Janis, I. L. (Eds.) Personality and persuasibility. New Haven: Yale University Press, 1959.
- Hovland, C. I., Janis, I. L., & Kelley, H. H. Communication and persuasion. New Haven: Yale University Press, 1953.
- Hovland, C. I., Lumsdaine, A. A., & Sheffield, F. Experiments on mass communication. Princeton: Princeton University Press, 1949.
- Hovland, C. I., & Mandell, W. An experimental comparison of conclusion-drawing by the communicator and by the audience. Journal of Abnormal and Social Psychology, 1952, 47, 581-588.
- Hovland, C. I., & Pritzker, H. A. Extent of opinion change as a function of amount of change advocated. Journal of Abnormal and Social Psychology, 1957, 54, 257-261.
- Hovland, C. I., & Weiss, W. The influence of source credibility on communication effectiveness. Public Opinion Quarterly, 1951-52, 15, 635-650.
- Hurwitz, J. I. Three delinquent types: a multivariate analysis. The Journal of Criminal Law, Criminology, and Police Science, 1965, 56, 328-334.
- Janis, I. L. Anxiety indices related to susceptibility to persuasion. Journal of Abnormal and Social Psychology, 1955, 51, 663-667.
- Janis, I. L., & Feshbach, S. Effects of fear-arousing communications. Journal of Abnormal and Social Psychology, 1953, 48, 78-92.
- Janis, I. L., & Field, P. B. Sex differences and personality factors related to persuasibility. In C. I. Hovland & I. L. Janis (Eds.), Personality and persuasibility. New Haven: Yale University Press, 1959. Pp. 55-68.
- Janis, I. L., & Rife, D. Persuasibility and emotional disorder. In C. I. Hovland & I. L. Janis (Eds.), Personality and persuasibility. New Haven: Yale University Press, 1959. Pp. 121-137.
- Jenkins, R. L., & Glickman, Sylvia. Patterns of personality organization among delinquents. Nervous Child, 1947, 6, 329-339.

- Juergs, E. H., & Harvey, O. J. Conceptual systems and delinquency. Technical Report No. 6, Contract Nonr 1147(07), University of Colorado, 1964.
- Katz, E., & Lazarsfeld, P. F. Personal influence: the part played by people in the flow of mass communication. Glencoe, Illinois: Free Press, 1955.
- Kelley, H. H., & Volkart, E. H. The resistance to change of group-anchored attitudes. American Sociological Review, 1952, 17, 453-465.
- Kelman, H. C., & Hovland, C. I. "Reinstatement" of the communicator in delayed measurement of opinion change. Journal of Abnormal and Social Psychology, 1953, 48, 327-335.
- King, B. T. Relationships between susceptibility to opinion change and child-rearing practices. In C. I. Hovland & I. L. Janis (Eds.), Personality and persuasibility. New Haven: Yale University Press, 1959. Pp. 207-221.
- Lazarsfeld, P. F., Berelson, B., & Gaudet, H. The people's choice. New York: Duell, Sloan, & Pearce, 1944.
- McGuire, W. J. Order of presentation as a factor in "conditioning" persuasiveness. In C. I. Hovland & I. L. Janis (Eds.), The order of presentation in persuasion. New Haven: Yale University Press, 1957. Pp. 98-114.
- Moeller, G., & Applezweig, M. H. A motivational factor in conformity. Journal of Abnormal and Social Psychology, 1957, 55, 114-120.
- Quay, H. C. Dimensions of personality in delinquent boys as inferred from the factor analysis of case history data. Child Development, 1964, 35, 479-484.
- Quay, H. C. (Ed.) Juvenile delinquency: research and theory. Princeton: Van Nostrand, 1965.
- Reiss, A. J. Social correlates of psychological types of delinquency. American Sociological Review, 1952, 17, 710-718.
- Sartoris, P. C. The susceptibility of two types of delinquents to social influence. Unpublished doctoral dissertation, University of Utah, 1966.
- Schweitzer, D., & Ginsburg, G. P. Factors of communicator credibility. In C. W. Backman & P. F. Secord (Eds.), Problems in social psychology. New York: McGraw-Hill, 1966. Pp. 94-102.

- Sherif, M., & Hovland, C. I. Social judgment. New Haven: Yale University Press, 1961.
- Sowles, R. C. Interrelationships among biographical, experiential, and personality variables for institutionalized juvenile delinquents. Unpublished doctoral dissertation, University of Utah, 1966.
- Tannenbaum, P. H. Initial attitude toward source and concept as factors in attitude change through communication. Public Opinion Quarterly, 1956, 20, 413-425.
- Thurstone, L. L. A scale for measuring attitude toward the movies. Journal of Educational Research, 1930, 22, 89-94.
- Watts, W. A., & McGuire, W. J. Persistence of induced opinion change and retention of the inducing message contents. Journal of Abnormal and Social Psychology, 1964, 68, 233-241.
- Weiss, W. A " sleeper " effect in opinion change. Journal of Abnormal and Social Psychology, 1953, 48, 173-180.
- Weiss, W. Opinion congruence with a negative source on one issue as a factor influencing agreement on another issue. Journal of Abnormal and Social Psychology, 1957, 54, 180-186.
- Whittaker, J. O. Sex differences and susceptibility to interpersonal persuasion. Journal of Social Psychology, 1965, 66, 91-94.
- Wiener, M., Carpenter, J. T., & Carpenter, B. External validation of a measure of conformity behavior. Journal of Abnormal and Social Psychology, 1956, 52, 421-422.
- Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill, 1962.
- Yates, F. Contingency tables involving small numbers and the  $\chi^2$  test. Journal of the Royal Statistical Society (Supplement), 1934, 1, 217-235.
- Youtz, Adella C., Robbins, P. R., & Havens, J. W. Psychological resistance and the delayed effects of a persuasive communication. Journal of Social Psychology, 1964, 62, 45-55.

## APPENDICES

APPENDIX A

The Conceptual Systems Test

PERSONAL OPINION SCALE<sup>2</sup>

NAME \_\_\_\_\_

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. The survey covers many different topics--some of which you may find yourself agreeing strongly with, disagreeing just as strongly with others, and perhaps uncertain about others.

DIRECTIONS: You are to decide the extent to which you agree or disagree with each of the following statements. Record your responses on the separate answer sheets in accordance with the scheme shown below. Try to work as rapidly as possible, without too much deliberation over any particular statement, indicating only your first impressions.

HOW TO MARK YOUR ANSWER SHEETS: Fill in the space corresponding to the answer category that best describes the extent to which you agree or disagree with the statement. The meaning of the answer categories is as follows:

+3 agree very much      +2 agree moderately      +1 agree a little  
-1 disagree a little      -2 disagree moderately      -3 disagree very much

- REMEMBER:
- (1). Be sure that the statement number of the statement you are reading corresponds with the number you are marking on the answer sheet.
  - (2). Be sure that the way you mark the answer sheet accurately represents your personal opinion.
  - (3). Make only one rating for each statement.
  - (4). Be sure to completely fill in the space representing your answer.
  - (5). As a last step, check your answer sheets to make sure you have answered all questions and that your name is at the top left of each sheet.

<sup>2</sup>Revised Conceptual Systems Test (CST) courtesy of O. J. Harvey and J. K. Hoffmeister (University of Colorado, Boulder).



## Personal Opinion Scale

1. I think I have more friends than most people I know.
2. Contributing to human welfare is the most satisfying human endeavor.
3. I feel like blaming others when things go wrong for me.
4. I like to meet new people.
5. No man can be fully successful in life without belief or faith in divine guidance.
6. I feel like telling other people off when I disagree with them.
7. More and more I feel helpless in the face of what's happening in the world.
8. I like to help my friends when they are in trouble.
9. I always like for other people to tell me their problems.
10. I like to criticize people who are in a position of authority.
11. I like to show a great deal of affection toward my friends.
12. I feel at home with almost everyone and like to participate in what they are doing.
13. In the final analysis events in the world will ultimately be in line with the master plan of God.
14. The dictates of one's religion should be followed with trusting faith.
15. I like to keep my letters, bills, and other papers neatly arranged and filed according to some system.
16. It hurts me when anybody is angry at me.
17. Most people can still be depended upon to come through in a pinch.
18. I am always the last one to leave a party.

19. Most public officials are really interested in the poor man's problems.
20. I like to join clubs or social groups.
21. Any written work that I do I like to have precise, neat and well organized.
22. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.
23. I like to have my meals organized and a definite time set aside for eating.
24. I like to do things with my friends rather than by myself.
25. I like to have a place for everything and everything in its place.
26. I enjoy very much being a part of a group.
27. Religion is best viewed as a social institution.
28. Most people in public office are really interested in the problems of the poor man.
29. There is no excuse for lying to someone else.
30. I like to help other people who are less fortunate than I am.
31. I like to have my life so arranged that it runs smoothly and without much change in my plans.
32. I like my friends to confide in me and to tell me their troubles.
33. I like to have my work organized and planned before beginning it.
34. Government officials are as interested in serving the poor as others.
35. I enjoy making sacrifices for the sake of the happiness of others.
36. I feel like making fun of people who do things that I regard as stupid.

37. Sin is but a cultural concept built by man.
38. I like to keep my things neat and orderly on my desk or workspace.
39. I prefer to do things alone, rather than with my friends.
40. I prefer clear-cut fiction over involved plots.
41. Honesty is the best policy in all cases.
42. I think I am stricter about right and wrong than most people.
43. I believe that to attain my goals it is only necessary for me to live as God would have me live.
44. I prefer a story that has two themes rather than one that has five or six themes going at once.
45. I find that a well-ordered mode of life with regular hours is suitable to my personality.
46. I like to form new friendships.
47. These days a person doesn't really know whom he can count on.
48. There are some things which God will never permit man to know.
49. Politicians have to bribe people.
50. I like to start conversation.
51. I feel like getting revenge when someone has insulted me.
52. I am a very sociable person who gets along easily with nearly everyone.
53. I like to treat other people with kindness and sympathy.
54. All in all, it is better to be humble and honest than to be important and dishonest.

55. I don't like to work on a problem unless there is a possibility of coming out with a clear-cut answer.
56. I like to sympathize with my friends when they are hurt or sick.
57. I don't like for things to be uncertain and unpredictable.
58. You sometimes can't help wondering whether anything's worthwhile anymore.
59. I like to plan and organize the details of any work I undertake.
60. The way to peace in the world is through religion.
61. Most people who get ahead in the world lead clean, moral lives.
62. Guilt results from violation of God's law.
63. Anyone who completely trusts anyone else is asking for trouble.
64. I like to give lots of parties.
65. One should take action only when sure it is morally right.
66. Marriage is the divine institution for the glorification of God.
67. I like to make as many friends as I can.

APPENDIX B

The Nine Criterion Factors Utilized  
to Score the CST

## Obl. Fact. Coef.

I DIVINE FATE CONTROL (DFC)<sup>3</sup>

43	I believe that to attain my goals it is only necessary for me to live as God would have me live.	.82
13	In the final analysis events in the world will ultimately be in line with the mast plan of God.	.81
60	The way to peace in the world is through religion.	.80
62	Guilt results from violation of God's law.	.80
66	Marriage is the divine institution for the glorification of God.	.77
5	No man can be fully successful in life without belief or faith in divine guidance.	.71
37	Sin is but a cultural concept built by man.	-.62
14	The dictates of one's religion should be followed with trusting faith.	.61
48	There are some things which God will never permit man to know.	.56
27	Religion is best viewed as a social insitution.	-.52

## II NEED FOR SIMPLICITY-CONSISTENCY (NS-C)

44	I prefer a story that has two themes rather than one that has five or six themes going at once.	.68
40	I prefer clear-cut fiction over involved plots.	.55
55	I don't like to work on a problem unless there is a possibility of coming out with a clear-cut answer.	.39

## III NEED FOR STRUCTURE-ORDER (NS-O)

25	I like to have a place for everything and everything in its place.	.85
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<sup>3</sup>Revised CST factors courtesy of O. J. Harvey and J. K. Hoffmeister (University of Colorado, Boulder).

III (continued)	Obl. Fact. Coef.
38 I like to keep my things neat and orderly on my desk or workspace.	.80
33 I like to have my work organized and planned before beginning it.	.77
15 I like to keep my letters, bills, and other papers neatly arranged and filed according to some system.	.72
31 I like to have my life so arranged that it runs smoothly and without much change in my plans.	.61
59 I like to plan and organize the details of any work that I undertake.	.59
21 Any written work that I do I like to have precise, neat and well organized.	.53
57 I don't like for things to be uncertain and unpredictable.	.49
45 I find that a well organized mode of life with regular hours is suitable to my personality.	.48
23 I like to have my meals organized and a definite time set aside for eating.	.44
IV MORAL ABSOLUTISM (MA)	
41 Honesty is the best policy in all cases.	.66
29 There is no excuse for lying to someone else.	.66
42 I think I am stricter about right and wrong than most people.	.50
54 All in all, it is better to be humble and honest than to be important and dishonest.	.48
61 Most people who get ahead in the world lead clean, moral lives.	.38

## V NEED TO HELP PEOPLE (NHP)

32	I like my friends to confide in me and to tell me their troubles.	.77
9	I always like for other people to tell me their problems.	.77
8	I like to help my friends when they are in trouble.	.72
2	Contributing to human welfare is the most satisfying human endeavor.	.70
30	I like to help other people who are less fortunate than I am.	.70
53	I like to treat other people with kindness and sympathy.	.58
11	I like to show a great deal of affection toward my friends.	.57
56	I like to sympathize with my friends when they are hurt or sick.	.56
35	I enjoy making sacrifices for the sake of the happiness of others.	.50
16	It hurts me when anybody is angry at me.	.45

## VI NEED FOR PEOPLE (NP)

20	I like to join clubs or social groups.	.74
26	I enjoy very much being a part of a group.	.74
4	I like to meet new people.	.68
67	I like to make as many friends as I can.	.67
46	I like to form new friendships.	.65
52	I am a very sociable person who gets along easily with nearly everyone.	.63
12	I feel at home with almost everyone and like to participate in what they are doing.	.61



VI (continued)		Obl. Fact. Coef.
50	I like to start conversation.	.60
64	I like to give lots of parties.	.59
18	I am always the last one to leave a party.	.59
39	I prefer to do things alone, rather than with my friends.	-.57
1	I think I have more friends than most people I know.	.52
24	I like to do things with my friends rather than by myself.	.52
VII INTERPERSONAL AGGRESSION (IA)		
6	I feel like telling other people off when I disagree with them.	.66
51	I feel like getting revenge when someone has insulted me.	.61
36	I feel like making fun of people who do things that I regard as stupid.	.56
3	I feel like blaming others when things go wrong for me.	.55
10	I like to criticize people who are in a position of authority.	.46
VIII ANOMIE (A)		
28	Most people in public office are really interested in the problems of the poor man.	-.80
47	These days a person doesn't really know whom he can count on.	.75
34	Government officials are as interested in serving the poor as others.	-.72

## VIII (continued)

## Obl.Fact.Coef.

19	Most public officials are really interested in the poor man's problems.	-.68
58	You sometimes can't help wondering whether anything's worthwhile anymore.	.61
22	It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.	.61
7	More and more I feel helpless in the face of what's happening in the world.	.59
63	Anyone who completely trust anyone else is asking for trouble.	.57
49	Politicians have to bribe people.	.55
17	Most people can still be depended upon to come through in a pinch.	.38

## IX ABSTRACTNESS (ABST)

(This is a higher-order cluster made up of clusters I, III, and IV + item 65)

Cluster I (DFC)	.64
Cluster III (NS-O)	.52
Cluster IV (MA)	.70
65 One should take action only when sure it is morally right.	.63

Note: The following raw cut-off scores (Harvey & Hoffmeister, 1967) were used for selecting system 1 boys: (a) above 4.00 on DFC; (b) above 4.00 on NS-O; (c) above 4.00 on MA; (d) above 4.00 on NP; (e) below 3.30 on IA; and (f) below 3.00 on ABST. System 2 boys were selected as follows: (a) below 3.50 on DFC; (b) below 3.70 on NS-O; (c) below 3.80 on MA; (d) below 3.60 on NP; (e) above 3.50 on IA; and (f) above 3.30 on ABST. Homogeneity ratios for these six factors in the present delinquent sample ranged from  $HR=.178$  to  $HR=.300$  ( $HR=.150$  was the critical level).

APPENDIX C

Attitude Questionnaire Measuring Opinions  
toward the Juvenile Court and Detention

Attitude Questionnaire<sup>4</sup>

NAME \_\_\_\_\_

I would like your help in finding out some opinions you have about certain things. I am sure that you will find the following items to be of interest to you. There are no right or wrong answers.

Instructions: Please make an "X" above your answer, depending on whether you agree or disagree and to what extent you agree or disagree. Please make only one "X" for each item.

1. I like to see movies once in a while but they do disappoint you sometimes.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

2. The Juvenile Court Judge is just like a father to boys.<sup>j</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

3. Boys believe that the detention home can do a lot to change them.<sup>d</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

4. Boys would rather do what the Juvenile Court Judge says more than anyone else they know.<sup>j</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

<sup>4</sup>The questionnaire consisted of Thurstone's (1930) items referring to movies<sup>m</sup>, and Chapman's (1960) items referring to the juvenile court<sup>j</sup> and detention<sup>d</sup>. Thurstone's items were inserted randomly, while the serial order of Chapman's items was identical with his original scales. Instructions were devised by the E.

5. The detention home is a good place for boys.<sup>d</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

6. The movies occupy time that should be spent in more wholesome recreation.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

7. I am tired of the movies; I have seen too many poor ones.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

8. There is little chance of fair treatment in the juvenile court unless you have pull.<sup>jr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

9. Boys would rather stay in school for a year than to spend a few days in the detention home.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

10. The movies to me are just a way to kill time.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

11. It's hard for a boy to get a square deal in the juvenile court.<sup>jr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

<sup>r</sup>Agreement with these items is considered socially less acceptable, and the weights were reversed for purposes of scoring.

12. Boys who go to the detention home don't have chance to make good in life.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

13. Movies increase one's appreciation of beauty.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

14. The juvenile court is too hard on boys for little things.<sup>jr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

15. The detention home is just like the home of a large family.<sup>d</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

16. Older boys would rather go to the criminal court than to the juvenile court.<sup>jr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

17. Older boys would rather go to jail than to the detention home.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

18. Movies are the most important cause of crime.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

19. A movie is the best entertainment that can be obtained cheaply.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

20. The Juvenile Court Judge gives a boy better advice than preachers.]

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

21. Movies are just a harmless pastime.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

22. The detention home is a place for tough boys.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

23. The movies are the most vital form of art today.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

24. I think the movies are fairly interesting.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

25. If a boy tells the truth in the juvenile court the Judge won't be too hard on him.]

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

26. The adults in the detention home put too many boys in the same room.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

27. Poor boys are treated the same as other boys in the juvenile court.]

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

28. A movie once in a while is a good thing for everybody.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

29. Most boys are afraid of going to the detention home.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

30. It is a sin to go to the movies.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

31. The adult workers in the juvenile court are very kind.<sup>j</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

32. The movies are one of the few things I can enjoy by myself.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

33. The detention home is just like a playground.<sup>d</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

34. The juvenile court is very helpful in showing a boy the right way to act.<sup>j</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

35. Boys will do anything to stay out of the detention home.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree



36. Sometimes I feel that the movies are desirable and sometimes I doubt it.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

37. Boys don't believe that the juvenile court should make them pay for stolen goods.<sup>fr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

38. The detention home is just like a jail.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

39. Bad boys ought to be sent to the criminal courts rather than the juvenile court.<sup>j</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

40. I'd never miss the movies if we didn't have them.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

41. The influence of the movies is decidedly for good.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

42. The detention home is a place for "sissy boys."<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

43. Many boys would like to go to the juvenile court to see what goes on.<sup>j</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

44. The detention home should be done away with.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

45. There would be very little progress without the movies.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

46. The movies are good, clean entertainment.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

47. Almost anything can be fixed in the juvenile court.<sup>jr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

48. The adults in charge of the detention home are too soft on boys.<sup>dr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

49. A boy learns a lot of good things while in the detention home.<sup>d</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

50. The movies are the best civilizing device ever developed.<sup>m</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

51. The juvenile court sends boys to the Boys' Industrial School for little things.<sup>jr</sup>

Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree

52. The Judge in the juvenile court has too much power over boys.<sup>jr</sup>

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

53. Movies are all right but a few of them give the rest a bad name.<sup>m</sup>

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Note: Chapman (1960) selected these items from a total item pool of 250 items. Each item of both scales discriminated between delinquent boys (low scores) and non-delinquent boys (high scores) ( $CR > 2.0$ ).

APPENDIX D

Items Measuring Credibility Characteristics, Absolute  
Recall, and Relative Recall of the Source

NAME \_\_\_\_\_

Would you please rate the speaker that you just heard on the following items (place an "X" on the line above your choice):<sup>5</sup>

NAME \_\_\_\_\_

A few weeks ago you heard a speaker talk about boys who get in trouble with the law, and about the juvenile court and detention. Would you please rate this speaker as you feel about him now on the following items (place an "X" on the line above your choice):<sup>6</sup>

(1) Do you think he is an important person?

_____ Highly Important	_____ Important	_____ Undecided	_____ Unimportant	_____ Highly Unimportant
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(2) Is he qualified to speak about treating delinquent boys?

_____ Highly Qualified	_____ Qualified	_____ Undecided	_____ Unqualified	_____ Highly Unqualified
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(3) Did you expect him to say what he did about treating delinquent boys?

_____ Highly Expected	_____ Expected	_____ Undecided	_____ Unexpected	_____ Highly Unexpected
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Would you please write the speaker's name and occupation:<sup>7</sup>

Name \_\_\_\_\_

Occupation \_\_\_\_\_

<sup>5</sup>Instructions for Session II.

<sup>6</sup>Instructions for Session III.

<sup>7</sup>Instructions for Sessions II and III.

NAME \_\_\_\_\_

Which of the following speakers did you hear a few weeks ago?  
(Place an "X" on the line across from your choice.)<sup>8</sup>

- (a) A salesman (Mr. Parker) \_\_\_\_\_
- (b) An automobile designer (Mr. Roberts) \_\_\_\_\_
- (c) A psychiatrist (Dr. Johnson) \_\_\_\_\_
- (d) A policeman (Mr. Brown) \_\_\_\_\_
- (e) A janitor (Mr. Smith) \_\_\_\_\_
- (f) An artist (Mr. Jackson) \_\_\_\_\_
- (g) An ex-convict (Mr. Webster) \_\_\_\_\_

<sup>8</sup>Item administered as a separate form at the end of Session III.

APPENDIX E

Introductions to the Communication

Low Prestige - Low Expertise and Low Congruence - (Janitor)

Before I begin my talk to you this evening, let me tell you a little bit about myself. My name is Duane Smith, and I am a janitor from Park City High School. I have been a janitor ever since I quit high school. Most of the things I have heard about boys who get in trouble at the school where I work come from teachers and other boys there. I also get a lot of my information from what I read in the newspapers. (Body of text)

Low Prestige - High Expertise and High Congruence - (Policeman)

Before I begin my talk to you this evening, let me tell you a little bit about myself. My name is Allan Brown, and I am a policeman from Salt Lake City. I have had a lot of experience with boys, and have been personally involved in apprehending boys who get in trouble with the law. (Body of text)



High Prestige - Low Expertise and Low Congruence - (Automobile Designer)

Before I begin my talk to you this evening, let me tell you a little bit about myself. My name is Terry Roberts, and I have been an automobile designer for General Motors in Detroit for the past five years. Before being promoted to the position of designer, I was a race driver for General Motors. (Body of text)

High Prestige - High Expertise and High Congruence - (Ex-convict)

Before I begin my talk to you this evening, let me tell you a little bit about myself. My name is Jim Webster, and I am on parole from the state prison. Before getting my parole and becoming a machinist, I served time at the "Point" for burglary and car theft. (Body of text)

APPENDIX F

Communication

I would like to talk to you this evening for a few minutes about some of the problems that boys have during their teenage years. Being a teenager is difficult for almost everyone because it is a time when you are no longer a child and yet not quite an adult. Probably the most serious problem in the United States today for the teenage boy is the difficulty he may have in obeying local and national laws. Today's society has great difficulty in dealing effectively with the rapidly increasing rate of crime. Before I talk about some of the ways that our society has tried to prevent crime and help individual offenders, I'd like to tell you about some of the ways boys can get started in delinquent activities.

Very often, a boy can grow up in a family where one or both of the parents fail to offer the emotional support which is important for growth. In addition, parents may not provide enough discipline in the way of both praise and, at times, punishment for the boy to learn how to behave or what he may expect from others. Such a home life often results in confusion and frustration for the boy. Sometimes, parents have problems of their own and may "take them out" on their children by treating them harshly and punishing them whenever they feel like it. All of these situations might be thought of as creating defiance and rebellion in the teenage boy.

Sometimes, a boy grows up in a family where one or both of the parents, themselves, participate in some kind of criminal activity. Since children often learn how to behave from the way their parents act, this kind of situation can lead to the development of juvenile delinquency. Finally, a boy may want to break the law because other boys of his age influence him to "go along with the crowd." Most of the boys who break the law are usually members of some kind of gang.

Now that I have mentioned some of the ways that a boy can get started in delinquent activities, let me tell you some of the ways that juvenile delinquency can be prevented for the betterment of the individual offender and for society. There are some people who think that detention centers and the juvenile court treat the teenage offender as if he were a hardened criminal. They think that this method of handling delinquent boys is based upon the idea that boys who break the law should simply be punished for their behavior. If boys are punished for their behavior, they "learn their lesson" and will stop breaking the law. These people think that detention centers and the juvenile court always treat teenage offenders as if they know what's "right and wrong" and deserve to be punished to make them behave properly.

On the basis of my experience, however, I cannot agree with these people. Detention centers and the juvenile court offer the teenage offender many more opportunities than just punishment for

their offenses. Detention centers, for example, try to evaluate boys in terms of what is best for the boy and for society as a whole. The juvenile court judge tries to decide, as best he can on the basis of as many facts as possible, whether the boy should receive individual counseling or counseling with his family, whether the boy should receive institutional treatment, or whether the boy should be released from the court and placed on probation. Because of these alternatives, I am confident that detention centers and the juvenile court treat teenage offenders fairly and with great respect for their personal welfare and future. Boys are certainly not treated like adults who break the law by these agencies.

From what I have said, I honestly believe that legal agencies, such as detention centers and the juvenile court, do the best job of helping boys today. These agencies neither punish them severely nor let them "get away" with their offenses, but try to treat them as human beings. Although these legal agencies make some mistakes in treating some boys, the juvenile court and detention centers do their best to help as many boys as possible. They are the most effective way we have of helping boys. Thank you for your attention.

APPENDIX G

Mean Attitude Scores

Table 10

Mean Attitude Scores for  $T_0$ ,  
 $T_1$ , and  $T_d$  Conditions

System	Prestige	Expertise- Congruence	$T_0$	$T_1$	$T_d$
1	Low	Low (Janitor)	95.7	95.3	90.7
		High (Policeman)	98.6	100.7	100.1
	High	Low (Designer)	98.7	97.1	95.9
		High (Ex-convict)	110.4	111.0	105.9
2	Low	Low (Janitor)	96.3	99.3	103.1
		High (Policeman)	101.3	96.7	100.7
	High	Low (Designer)	88.6	96.4	95.9
		High (Ex-convict)	95.7	99.4	98.7

## VITA

Name	Albert Charles Schmid
Birthplace	Salida, Colorado
Birthdate	9 September 1941
High School	Longmont High School Longmont, Colorado
University	University of Colorado Boulder, Colorado 1959-1963 University of Utah Salt Lake City, Utah 1963-1968
Degrees	B. A., University of Colorado Boulder, Colorado, 1963 M. A., University of Utah Salt Lake City, Utah, 1965
Teaching Assistant	Psychology of Childhood Psychology of the Retarded Child
Internship	Patton State Hospital Patton, California 1965-1966
Professional Organizations	The Society of the Sigma Xi Associate Member
Professional Positions	Consultant Psychologist Utah State Industrial School Ogden, Utah 1966-1968



Program of Future Research

by

Albert Charles Schmid

A set of proposals submitted to the faculty of the University  
of Utah in partial fulfillment of the requirements  
for the degree of

Doctor of Philosophy

Department of Psychology

University of Utah  
January, 1968

#### Program of Future Research

1. Although the results were not in the predicted direction, differential susceptibility to social influence was demonstrated in the present investigation. Furthermore, this differential persuasibility was consonant with Harvey, Hunt, and Schroder's conceptual framework (1961) when the majority of sources employed in this research are viewed as being relatively low in legal or institutional authority. Since this conceptual scheme evolved largely from, and is based primarily upon, normal samples, effort should be undertaken to assess the generalizability of this particular scheme for other deviant populations. For example, it is conceivable that even individuals exhibiting more severe behavior disorders, e. g., psychotics, can be classified in terms of this conceptual framework. Therefore, research endeavors should attempt to broaden the predictive validity of this framework.

2. Since delinquent boys in this research did not reliably exhibit the sleeper effect under the conditions hypothesized, future research should devote attention to sampling nondelinquent populations with respect to this phenomenon. If possible, a comparative investigation of delinquent and nondelinquent boys should be undertaken. In consonance with the trend of this research, it is conceivable that system 1 and system 2 individuals might differ in their exhibition of the sleeper effect under identical conditions.

In planning comparative research involving delinquents and non-delinquents, the experimenter would do well to consider a number of alternative attitudes. The specific attitudes utilized in the present investigation, i. e., toward legal agencies, could potentially create practical and ethical problems in view of the likelihood that communication sources would be required to advocate an unfavorable position toward these agencies within the community. Thus, the researcher could avoid possible public "sensitivity" by selecting issues which are less ego-involving and have minimal moral overtones for most adults in the community. Such issues might include attitudes toward education vs. athletics.

3. A review of the psychological literature on juvenile delinquency reveals little research directly concerned with sex differences within the delinquent population. Since Harvey, Hunt, and Schroder's conceptual framework (1961) has not been shown to be related to sex, delinquent girls should exhibit conceptual patterns similar to those of delinquent boys. If delinquent girls can be reliably classified as predominantly system 1 or system 2, an experimental design analogous to the present investigation should produce results comparable to those of delinquent boys.

4. The results of this research indicate that different communication sources have differing effects, depending upon conceptual system. For example, system 1 boys were most influenced by the automobile designer. In view of the result that system 2 boys were more persuasible generally than system 1 boys, as well as

the interpretation that most persons serving as sources of information in this research were relatively low in authority, it is reasonable to argue that system 1 and system 2 boys are optimally susceptible to social influence under conditions where communicators are representative of high authority and low authority, respectively. Thus, future research endeavors will likely need to involve the utilization of different sources for these two conceptual systems. If this is the case, the researcher will have some difficulty in demonstrating that the different sources are comparable, or that they can be varied along a reliable and valid dimension. Such comparability of sources is necessary in order to achieve some degree of experimental control.

5. Future research involving delinquent populations should attempt to evaluate and control, if possible, the social desirability variable. In view of the institutional nature of state training schools, this response set seems especially likely to occur. If possible, the experimenter should select attitudes which are relatively ego-involving, but which are not as closely associated with the social "facade" of the delinquent. Under such conditions, the social desirability variable would likely have less influence upon delinquent responsiveness to attitude questionnaires. Furthermore, such research may be able to effectively separate public from private commitment to an attitudinal position.

4

6. If the influence of the social desirability variable is minimal, the relatively neutral opinions toward legal agencies and the trend toward a sleeper effect exhibited by delinquent boys in the present research are relatively valid. In view of Sherif and Hovland's general conclusion (1961) that individuals who hold highly ego-involving stands on an issue are less likely to be susceptible to persuasive communication, future research attempting to demonstrate the sleeper effect should employ attitudes on which the particular sample has relatively neutral opinions. Otherwise, it will be difficult to obtain the expected initial differences between groups exposed to high and low prestige communicators which is necessary for the subsequent occurrence of this phenomenon.

7. Although the present investigation represents relatively "pure" research, investigations which are directly concerned with various applications of the differing rehabilitative approaches implied by the present research would be of substantial value. For example, a design consisting of four groups could be set up in the following manner: (1) system 1 boys under conditions of low supervisory authority; (2) system 1 boys under conditions of high supervisory authority; (3) system 2 boys under conditions of low supervisory authority; and (4) system 2 boys under conditions of high supervisory authority. The findings of the present investigation suggest that groups (2) and (3) would show more behavioral improvement than groups (1) and (4). Of considerable importance would be the establishment of reliable and valid criteria for behavioral progress.

8. Finally, research should focus upon the evaluation of applications of this research, as well as that of Juers and Harvey (1964), with respect to release and recidivism patterns among delinquent boys. Such a program of research could prove quite useful for predicting "base rates" for delinquent boys in an institutional setting. On the basis of this investigation, as well as the research of Juers and Harvey (1964), system 1 boys would be better candidates for release and exhibit a lower recidivism rate than system 2 boys.

**END**

7. about more