STATUS INCONGRUITY AND ATTITUDES

by

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ABSTRACT

The relationship between three status dimensions: (ethnic background, gender and paternal education) and attitudes toward Negroes and authority was examined.

Predictions based on status incongruity theory are as follows: (1) subjects with a paternal inconsistency pattern of low ethnic and high educational status should express much less anti-Negro and authoritarian attitudes, while (2) subjects with a paternal incongruity configuration of high ethnic and low educational status should express somewhat more anti-Negro and authoritarian attitudes than expected on the basis of the additive effects of the independent status dimensions.

Only some of the predictions concerning the effects of paternal ethnic and educational status were supported. No evidence was found for the acceptance of the status incongruity model.

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Introduction

The concept of social class,and consequently its usage as an explanatory tool, has been repeatedly disputed in the sociological and psychological literature. Since community members disagree both about the number of social classes in their community (Hollingshead, 1949; Lenski, 1952) and the placement of others into classes (Warner, Meeker & Eels, 1949), it is difficult to make the term "social class" very meaningful and precise.

While it is apparent that the traditional reflector of social class has been economic position (Lipset and Bendix, 1951), it is significant to note that status and class are also assessed by the consideration of occupation, education and ethnicity (Sargent, 1953). As a result, it has not only become preferred but also necessary to analyse an individual's ranking on a number of status dimensions.

Conceptual analysis and research have shifted away from the uni-dimensional approach of one fixed or global position derived from social class membership, towards the multi-dimensional analysis of the variety of status components exhibited by an individual. Thus, each person exhibits a particular status pattern determined by his position on a number of vertical status hierarchies. Certain values and expectancies are associated with each rank of the constituent status factors, and ranks along different status dimensions may be compared with respect to degree of congruence. In the last fifteen years, a large body of literature has been built up on the behavioral and attitudinal consequences of status incongruity.

As a product of their past experiences, people learn to associate certain status factors with others, and thus develop expectancies concerning the relationships among status factors. These expectancies are relatively constant within a society, and thus acquire some of the characteristics of norms. Degree of experienced status incongruity is a direct function of the discrepancy between the complex of status factors that individuals exhibit and the relevant normative expectancies of those persons with whom they interact. The greater this discrepancy, the greater the status incongruity experienced.

Sampson (1963) refined the conceptual implications of status expectancies by relating status incongruity theory to cognitive dissonance theory and so arrived at a new concept - expectancy congruence. For any status dimension, there are different expectancies associated with a given rank. If a positive relationship exists between two status factors, then a high ranking on one and a low ranking on the other is incongruous. However, expectancy incongruity differs from status incongruity in that if a negative or a non-relationship exists between two status factors, then a high ranking on one and a low ranking on the other is not an instance of expectancy incongruity, but is a case of status incongruity. This seems to be a novel interpretation of the problem, for in most research based on status incongruity theory (Jackson, 1962; Jackson & Burke, 1965; Kelley & Chambliss, 1966; Kenkel, 1956; Lenski, 1954; Treiman, 1966) different combinations of income, education, occupation, ethnicity and a number of other status variables were assumed to be positively related. According to Sampson, the relationships among these variables are not uniform. Some, such as occupation and education, are more closely associated than others, such as income and occupation (Porter, 1965 p. 10) or ethnicity and occupation. Consider, for example, the case of low occupational status, such as construction worker, which may be positively associated with high income, or the case of low ethnicity, Jewish, which may be related positively to both high education and income. Gilbert (1951), for example, has found

that college students most frequently characterize Jews by the traits; shrewd, intelligent, ambitious and industrious. Some negative results in previous studies may have been due to confusion between status and expectancy incongruity.

Some of the properties and implications of status incongruity (or lack of crystallization, inconsistency, or discrepancy, as it is also termed) relevant to this research are summarized by Malewski (1966). The greater the incongruence of status factors simultaneously perceived by others, the more insecure is the individual's status. The perception by others of incongruous status factors is therefore negatively reinforcing. An individual who exhibits several incongruent status factors, some of which are evaluated lower than others, will try to change the lower factors so that their evaluation will be raised. But certain status factors such as ethnicity, skin color and sex are ascribed, and generally cannot be changed. Some achieved status factors, such as education, occupation, and income can be changed only with difficulty, while still others may be changed with ease.

An individual who is unable to raise the lowly evaluated factors of his status will tend to reject the system of evaluation and join those who oppose the prevailing system. Exchange theory also predicts that incongruity may produce inequity and injustice, which in turn lead to dissatisfaction and frustration (Adams, 1965; Secord & Backman, 1964, pp. 288-302). Should injustice be due to less favorable outcomes (rewards) with given inputs (perceived relevant status factors), the individual will try to increase the former. This may be achieved through social reform.

Some research findings are relevant to these predictions. Goffman (1957) reported that individuals with discrepant rankings on income, education and occupation express a stronger preference for change in the power distribution of the government than do

status congruous individuals. The pattern of discrepancy may influence an individual to support either left-wing or right-wing political parties. Kelley & Chambliss (1966), Ringer & Sills (1952-53) and Rush (1967) have found right-wing voting tendencies, while Lenski (1954-1967) has found left-wing voting tendencies, depending on the pattern of incongruity examined.

The study by Lenski (1954) indicated that in general, status incongruous individuals tend to vote for the Democratic party, and show greater liberalism than congruous persons. However, the breakdown of data indicated that those with incongruity due to high achieved and low ethnic (ascribed) status were somewhat more liberal than persons with other types of incongruities.

Nevertheless, an attempted replication by Kenkel (1956) failed to find any relationship between political attitudes and discrepant ranking on various achieved status dimensions, while the Kelley & Chambliss (1966) study, using similar status variables, showed that status incongruous persons tended to be more conservative than congruous individuals.

A number of possible explanations for these conflicting findings were suggested. Lenski (1956, 1967), proposed an explanation in terms of varying patterns of incongruity. In particualr, he suggested that discrepancy between achieved and ascribed status factors produces the greatest effect on political attitudes and behavior.

Mitchell (1964), however, after re-examining some of Lenski's (1954) data, concluded that ethnicity alone seems to explain most of his results. Hyman (1966) also criticized Lenski for the failure to take into account the nature of the association of each status dimension with the dependent variable.

Nevertheless, another line of reasoning and research evidence concerning the relationship between incongruity and stress, seems to indicate that predictions of behavior are best when both the effects of the status variables plus those of status incongruity are taken into consideration.

The rank of an individual on a status dimension partially controls his expectations of others, of himself, and also others' expectations of him. When a person's status characteristics are incongruous, both his own and others' expectancies will often be in conflict. This situation may lead to strain, frustration and uncertainty (Treiman, 1966). This strain can manifest itself in various ways other than political attitudes, and has been investigated in attempts to account for group performance and conflict (Adams, 1954; Exline & Ziller, 1959), class consciousness (Landecker, 1963), stress (Jackson, 1962; Jackson & Burke, 1965), and prejudice (Treiman, 1966), among other phenomena.

Jackson (1962) postulated that frustration and uncertainty resulting from conflicting expectancies would lead to an abnormal amount of stress in status incongruous individuals. The instrument Jackson used to measure stress symptom levels consisted of a sixteen item closed-answer questionnaire. He used three status measures - two achieved and one ascribed. The occupational dimension was divided into three ranks: Rank 1 - professional and business occupations; Rank 2 - clerical and skilled labor; and Rank 3 - semi-skilled, unskilled and service occupations. Educational status was ranked as follows: Rank 1 - College graduate or some college; Rank 2 - high school graduate or some high school; and Rank 3 - eight years of schooling or less. Racial-ethnic background was established by assigning Rank 1 to Old English or Old American, Rank 2 to Northwestern European and Rank 3 to Southeastern European, Jewish, American Indian and Negro.

Although Jackson's original hypothesis was not supported, he found that persons with high racial-ethnic background and low educational and/or occupational status experienced an undue amount of stress, whereas those with the opposite configuration, low racial-ethnic and high educational and/or occupational status factors, did not differ from the status congruent individuals. Jackson explained these results by postulating that a person with low achieved and high ascribed status is likely to view his situation as one of personal failure and therefore will blame himself, experiencing high stress levels, while someone with high achieved and low ascribed status will be less likely to blame himself, instead seeing his problems as resulting from the unjust actions of others.

However, Mitchell (1964) has included this study in his criticism that research has not shown clearly whether an individual's ranking of high on one status dimension and low on another (that is, incongruity) is responsible for his score on a dependent variable, or whether his score is due to the independent effects of the status factors, or for both reasons. He suggested that a better test of status incongruity theory would involve the addition of several status dimensions, and then the demonstration that no single dimension or addition of dimensions can explain the observed results.

Heeding this suggestion, Jackson & Burke (1965) reinterpreted Jackson's earlier data. They developed a least squares equation to predict levels of the dependent variable, stress symptom levels, from an additive model of status effects. They hypothesized that should significant deviations from predicted values be found in the status incongruous groups, the effects of incongruity could be measured. Using high, medium and low rankings for educational, occupational and ethnic status factors, they set up a prediction equation through regression analysis. The deviations of predicted values from observed ones were then measured. Their findings

indicated that symptom levels of stress were higher in the incongruous groups than those predicted by the additive model. Thus, stress produced by the three main status factors of occupation, education and ethnicity did not account completely for observed results. Because of this finding, they set up two new models which contained the additive terms as well as interaction terms for incongruity. They concluded that, "these alternative models both fit the data better than the simple additive model, supporting the hypothesis that status inconsistency explains a portion of the variation in stress symptom level left unexplained by status ranks per se," (Jackson & Burke, 1965, p. 556).

While on the topic of stress, it is important to consider its relation to aggression, Jones & Gerard (1967, p.290) point out that as frustration and stress persist, the probability of the appearance of aggression increases. Aggression is more likely against persons of low status and power than against individuals of high status and power (Secord & Backman, 1964), especially since an aggressive response instigated by frustration caused by one target may be displaced and expressed towards another. Low status individuals such as members of ethnic minority groups seem convenient objects of such aggression. Stress, therefore, can be related to inter-group aggression and prejudice.

Treiman (1966) attempted testing the status incongruity model against an additive model of status effects, using attitudes toward Negroes as his dependent variable. This was measured by assessing the pro-integration sentiments of the respondents. The independent variables were four levels of family income and four educational rankings of the male head of the family. Treiman developed the hypothesis that individuals whose status factors are incongruous, and whose discrepant status positions give rise to conflicting expectancies, are likely to experience more strain and stress than those whose status components are congruous. The assumption is that

this strain could lead to increased prejudice levels regardless of the patterns of incongruity. Therefore, if status incongruity theory is useful, the feelings of strain should manifest themselves in higher prejudice level in the status incongruent groups than that predicted by an additive model. He set up a dummy variable multiple regression equation based on his data, similar to that of Jackson & Burke (1965), but with no interaction terms for status incongruity. Treiman's additive model thus took into account only the independent contribution of each status component. He found that this model was sufficient to explain the variation in prejudice in his data. He also found that for any income level with decreasing education, and for any educational level with decreasing income, prejudice usually increased. In general, prejudice was negatively related to both education and income.

Upon inspection of Treiman's table of results, it is evident that a status incongruity model which ignores different patterns of inconsistency could not explain his obtained data. Should incongruity have contributed to level of prejudice, negative deviations between actual minus predicted scores (that is, more prejudice) should have been found for the two most incongruous groups. Instead, Treiman found negative deviation only when low income was paired with high education, but not for the converse case. Therefore, he concluded that the status incongruity theory is not useful in improving predictions about prejudice. However, there are a number of points on which Treiman's study may be criticized.

Treiman's choice of independent variables was unfortunate, for although both the Lenski (1954) and Jackson & Burke (1962, 1965) studies have shown that the ethnic variable is an especially good predictor of attitudes and behavior, Treiman did not use it as a status factor. Furthermore, discrepancy between income

and education is not as expectancy incongruous as discrepancy between occupation and education (Porter, 1965). A plumber may be ranked high on income and low on education, and still not be very incongruous, however, it is very unusual to see a college graduate working as a plumber. Thus, the diminished amount of actual incongruity that is experienced by those with low education and high income may account for Treiman's finding that level of prejudice predicted by the additive model was greater than actual prejudice. In the case of high education coupled with low income, however, the effects of status incongruity were demonstrated, as predicted level of prejudice was lower than actual prejudice.

These observations clarify the next criticism; Treiman mistakenly assumed that any status incongruity would result in heightened levels of prejudice. Previous investigators (Jackson & Burke, 1962, 1965; Lenski, 1954) have found differential behavioral and attitudinal effects for different patterns of incongruity. The types of frustration and uncertainty felt by the individual with low education and high income may differ markedly from that felt by a person with the opposite status configuration. Further, there is no reason to assume, even if a positive relationship exists between two status variables, that the magnitude of incongruity felt by individuals with one status pattern is equivalent to that experienced by persons with the opposite configuration. Treiman's study also did not differentiate between male and female respondents, although Bogardus (1959) showed that prejudice against ethnic groups as measured by social distance scores is greater for females. Treiman may also be criticized for having assessed income for the whole family, while he used only the male's occupational status, thus not using parallel status dimensions. All these factors may serve to cast doubt upon Treiman's interpretation of his findings.

This summary of research evidence indicates that: (1) different patterns of incongruity should not be lumped together, (2) independent status effects should be investigated before postulating incongruity effects, (3) ascribed status variables should not be excluded and (4) status incongruity should not be confused with expectancy incongruity.

A vital status factor in predicting attitudes toward Negroes is education (Treiman, 1966). Stember (1961) has also found that the incidence of stereotyping Negroes is a decreasing function of level of education while Bettelheim & Janowitz (1964, p.326) have demonstrated that persons with higher education are more tolerant toward Negroes.

The Lenski (1954), Jackson (1962) and Jackson & Burke (1965) studies have pointed out the importance of ethnicity in determining attitudes and behavior. This status dimension is also a factor in the formation of attitudes toward minority groups. Stember (1961) found that at any level of education, individuals whose parents were born in the United States tended to hold stronger anti-Negro attitudes than those whose parents were immigrants. The data of Bettelheim & Janowitz (1964, p. 325), however, indicate a trend in the opposite direction, with low ethnic status being associated with stronger prejudice.

The latter's findings are substantiated by a number of other studies. Gray and Thompson (1953), using the Bogardus Social Distance Scale, found that Negro students were less friendly toward twenty-five national and ethnic groups than were white students. Allport & Kramer (1946) have also found that individuals with a low ethnic background were more prejudiced against minority group members than were persons with a high ethnic background. Secord & Backman (1964, p. 302) suggest that minority group members may either support the "status quo" because they also hope to achieve the high status of the majority, or they may reject the current system of evaluation and attempt to change the value consensus. Allport (1958, p. 150), on

the other hand, implies that when persons with a low ethnic background are prejudiced against minority groups, these persons are presumed to be linked to the majority group by sharing a common bond - prejudice.

Gender may not be a status variable relevant to predicting anti-Negro feeling, for although Bogardus (1959) found females to be higher on social distance, Stember (1961) discovered no sex differences in stereotyping.

Adorno et al. (1950) have suggested that intolerance is not a single independent attitude, but rather that intolerance reflects basic personality characteristics which may be expressed as a broad and coherent pattern of political, economic and social behavior. Scores on the F Scale of authoritarianism (which deals with attitudes and values) have been found to correlate positively and highly with scores on scales of prejudice and conservatism.

Although a number of criticisms have been levied against the extremeness of F Scale items and the likelihood of response bias (as all the items are phrased in one direction), a number of investigators have found that F Scale scores can reliably predict fundamentalism (Rhodes, 1960-61), yielding (Nadler, 1959) and behavioral differences in group situations (Haythorn et al., 1959). The data of a number of other investigators have also shown that conservatism, hostility, intolerance of human frailty (McClosky, 1958), prejudice against Negroes (Martin & Westie, 1959), a hostile world outlook, aggression (Christiansen, 1959), and authoritarianism (Smith & Rosen, 1958) are positively related.

Other studies have shown that a negative relationship exists between authoritarianism and education (MacKinnon & Centers, 1956; McDill, 1961). Research on the F Scale has also revealed that minority group members in general are more authoritarian than persons with a high ethnic background (Adelson, 1958; MacKinnon &

Centers, 1956; Steckler, 1957), while no relationship between gender and authoritarianism has been found (Adorno et al., 1950).

To sum up, there is evidence (Jackson, 1962; Jackson &Burke, 1965) that certain patterns of status incongruity lead to frustration and stress. Since intolerance and certain attitudes are positively related, the frustrations associated with these patterns may produce conservatism and prejudice. For example, incongruity due to high ascribed and low achieved status factors may produce these results, while incongruity due to low ascribed and high achieved status components may produce liberal and tolerant attitudes.

The present study is concerned with the attitudinal effects of frustration on persons with two different patterns of status incongruity. More specifically, it investigates the role played by discrepancy between ethnic background (ascribed) and education (achieved) on authoritarianism and attitudes toward Negroes and various local issues concerning racial prejudice. Since the subject population was composed of psychology students, an indirect measure of prejudice was required rather than a direct test, and a scale on which subjects rated the personality characteristics of two confederates (one Negro and one white) was used. This was done after the subjects had been exposed to a situation which was contrived in such a way as to draw attention to the color of the hands of the Negro and white confederates. Other investigators (Mann, 1958; Byrne & McGraw, 1964) have found that indirect measures of attraction based on behavior are more useful with relatively sophisticated subjects.

The subjects for this research were university students, for whom paternal status factors are both relevant and salient, since paternal values and status have a very strong role in determining those of the offspring (Berelson & Steiner, 1964, p. 562).

On the basis of the studies reviewed, certain predictions were made concerning the effects of status variables and status incongruity.

As data on stereotyping (Stember, 1961) and authoritarianism (Adorno et al, 1950) reveal no gender differences, it is expected that males and females will not differ on these measures. On the other hand, studies dealing with ethnic background have shown that minority group members are generally more prejudiced (Bettelheim & Janowitz, 1964; Gray & Thompson, 1953), and more authoritarian (Adelson, 1958; Mac - Kinnon & Centers, 1956; Steckler, 1957) than majority group members, and it is therefore predicted that individuals with low ethnic background will express more anti-Negro and authoritarian attitudes than high ethnic persons.

As education has been found to be negatively related to both prejudice (Stember, 1961) and authoritarianism (MacKinnon & Centers, 1956; McDill, 1961), persons with high paternal education are expected to be less prejudiced and authoritarian than those with low paternal education.

Studies of political behavior and stress suggest that persons with an incongruity pattern of low ethnic and high educational status tend to be more liberal and to have no higher stress symptom levels than status congruous individuals, while those with high ethnic and low educational status do experience more stress than those with the opposite configuration. Therefore, it is predicted that those subjects with a paternal incongruity pattern of low ethnic and high educational status will be much less authoritarian and anti-Negro than expected on the basis of the additive effects of status factors. Persons with the opposite configuration, however, are expected to be only somewhat more authoritarian and anti-Negro, as the incongruity and resulting frustration is assumed to be less for them, since high ethnicity coupled with low education is a relatively common status pattern (Brown, 1965; Porter, 1965).

In order to test these predictions, a research project was carried out using two different attitudinal measures of anti-Negro sentiment. One of these was concerned with assessing the extent to which Negroes are unfavorably stereotyped, while the second measure was more general. A modified version of the California F Scale of authoritarianism (Adorno et al., 1950, pp. 255-257) was used, as F Scale scores and anti-Negro attitudes are positively correlated (Adorno et al., 1950; Martin & Westie, 1959). In addition, two other scales were also used to provide a measure of attitudes toward salient local issues concerning Negroes.

Method

Subjects

Four different paternal status configuration categories were used, each one subdivided into male and female respondents. The categories were: (1) high ethnic and high education, (2) high ethnic and low education, (3) low ethnic and high education, and (4) low ethnic and low education.

The sample consisted of 38 male and 22 female white university students, ranging in age from 17 to 21. All were Canadian citizens and were living with both parents at the time of testing. Subjects were chosen on the basis of father's birthplace and educational level. Selection of subjects in each category was random (except where all members of a category had to be used), and based on the subjects' responses to a socio-economic background questionnaire (Appendix A) administered to approximately 1300 students.

There were two rankings of the fathers' educational status. High was assigned to those who had completed grade eleven or more (high school), and low to those who had completed grade eight or less (public school). The father's ethnic status was established according to Jackson & Burke's (1965) method of assigning high ranking to those of English, Canadian or American birth, and low ethnic status to those born in Southeastern European countries. Jews, however, were excluded from the sample, as their low ethnicity is not positively related to low education (Gilbert, 1951). Using this method of selection, the number of subjects per category varied from 5 to 11.

Procedure

In order to obtain a measure of anti-Negro attitudes, a contrived group task was created. Subjects were told that they were participating in a study dealing with problem solving efficiency.

Up to four subjects could be tested at a time with the aid of a two-level communication box and a hexagonal table (Appendix B). The hexagonal table was partitioned by 6 ft. 6 ins. high separators into six booths, each with a small writing surface and an armchair. Curtains were placed behind the chair of each booth, thus preventing subjects from having visual contact with those around the table and anyone else present in the experimental room (see Plate 1, Appendix B).

Two confederates of the experimenter, a male white and a male Negro student, occupied two opposite booths. Each confederate sat facing four slots, two on each of two levels. The slots were 7-1/2 x 8 ins. each, and equipped with doors. Two of the four slots were located 8 ins. above table level, while the other two were located directly above these, 16 ins. above table level (see Plate 2, Appendix B). Each top slot in the Negro confederate's booth was connected with the top slot in each adjacent booth. Each of his two lower slots was connected with one of the two lower slots in each of the two booths adjacent to the white confederate (see Plate 3, Appendix B). The situation was reversed for the white confederate.

Thus, each confederate had access to all four booths occupied by the subjects. The subjects' booths contained two slots each, located either 8 ins, or 16 ins. above table level, with each slot connecting with one of the confederates'. In addition to the two slots, the subject's booth contained a push button, located above eye level. The button was wired to a corresponding light on the panel of the adjacent confederate as well as to a light on the experimenter's control panel. Electronic

communication was also established between the confederates, as well as between each of them and the experimenter.

Subjects were conducted into the testing room by the experimenter, and seated in a booth. The writing surface contained a stop watch, three sheets of 8-1/2 x 11 ins. writing paper and a pencil, as well as an instruction sheet (Appendix C) and the problem which the subjects were required to attempt to solve (Appendix D). Subjects were led into the booths in a clockwise fashion, thus systematically determining seating arrangements.

The instructions informed the subject of the nature of the problem, which consisted of a seventeen word, extremely difficult cryptogram designed to frustrate the subjects. The text was a modified version of a passage from The Canterbury Tales by Chaucer (1952). The subjects were advised that 15 minutes after they had finished reading the instructions they would receive a message from each of the two slots, and that they were to take the message, and pass one of their own into the hand of each of the passers (actually the confederates). The messages they were to receive were supposedly hints from two other subjects who were also assigned the task of solving the same cryptogram. Subjects were instructed to prepare duplicate copies of their own hints, and to pass one into each of the two hands from which they were receiving a message (see Plate 4, Appendix B). This ensured attention to the hands (black and white) of the confederates. The subjects were then instructed to press the button indicating that they had finished reading the instructions and to give themselves 25 minutes to work on the task. At the end of the 25 minutes they were to press the button again. The subjects could summon the experimenter by repeatedly pressing the button .

To aid the subjects in their task, a specific clue was provided, as well as hints concerning the nature of cryptograms in general. Two alternate forms of the cryptogram were used. This was done in order to confuse subjects who might emerge simultaneously from the experimental situation, as well as to prevent them from realizing that no one had solved the problem.

The messages passed by the confederates were actually two different suggestions prepared by the experimenter, equal in apparent length and helpfulness (Appendix E), as one message provided one definite and two possible clues, while the other provided two definite clues. Each subject received two different hints in different handwritings. Twenty-three student judges had previously evaluated apparent personality characteristics evident in eight different handwriting samples. This was done on a 34-item, 6-point semantic differential scale (Appendix F). The two handwriting samples with the most similar profiles and totals were used.

Each confederate was first to pass a message fifty percent of the time. Message content, handwriting and order of passing were systematically arranged, so that the Negro confederate always passed message "a" in both handwritings first on cryptogram "I", while the white confederate always passed message "a" in both handwritings first on cryptogram "II". Thus both confederates always passed first with message "a" (Appendix G). This system compensated for any inequality between the contents of the two messages, as well as for handwriting differences.

After a confederate had completed message passing and receiving, he signaled to the other confederate, who then passed his message 30 seconds later.

After the subject has signaled that his 25 minutes were up, the experimenter brought him a questionnaire (Confederate Evaluation scale [Appendix H]) and asked

him to fill it out. This consisted of instructions on how to use the scales, plus two identical copies of the same 6-point, forced choice, 34-item semantic differential rating scale used previously to evaluate the handwriting samples. However, on top of one was the heading, "SUBJECT PASSING YOU MESSAGE FROM THE SLOT ON YOUR RIGHT", while on the second page, the word RIGHT was replaced by LEFT. The subject was instructed to fill in each item so that the experimenter could evaluate the type of help which he had received. The items on the semantic differential were especially constructed for this research, and consisted of bipolar adjectives, of which one was always more desirable than the other. A number of items also dealt specifically with words often used to stereotype Negroes, for example: superstitious, lazy, ostentatious, stupid (Gilbert, 1951).

The semantic differential rating instrument was developed to secure a measure of the connotative meaning of concepts (Osgood, Suci & Tannenbaum, 1957). Quantitative ratings of the object or concept are obtained from subjects, and the meaning of the concept for the individual is the profile of his rating on the different adjective items. In this case, however, profiles were not obtained, and the ratings of the subjects on the thirty-four items were added together, as all items constituted either favorable or unfavorable evaluations. The value of 1 was assigned to the most negative evaluation while a value of 6 was assigned to the most positive rating - the lower the score, the less favorable the evaluation. The maximum possible score was 204, while the minimum possible score was 34. The extent of stereotyping was measured by the magnitude of the difference between evaluations of the Negro and white confederates.

Having completed this task, the subject was again instructed to press the button. The experimenter then led him from the booth, and asked him to leave by the back door. Another experimenter, waiting at the back door, ostensibly subject recruiting, asked him to participate in his independent experiment. The subject was then led to another room (Appendix I), where he was asked to fill out two 7-point, 20-item semantic differential rating scales which were presented with a different notation from the previous (Appendix J). In these scales only thirteen items were scored, as the other seven were fillers. The concepts to be rated were BLACK STUDENTS and ADMINISTRATION, with order of heading alternated. A measure of more salient local issues concerning anti-Negro attitudes was thus obtained. These additional scales were included as the university had recently been closed for a week due to conflict concerning a racial issue between a group of students and the administration.

The items on these scales again consisted of favorable - unfavorable bipolar adjectives. The value of 7 was assigned to the most favorable rating, while the value of 1 was assigned to the most negative, and scores on the thirteen items were again added. The maximum possible score on each of these rating scales was 91, while the minimum was 13, thus, the higher the total, the more favorable the evaluation.

Attached to this scale was a modified version of form 40-45 of the F Scale (Adorno et al., 1950 pp. 255-257) (Appendix K). The maximum possible score was 196, the mid-point was 112 and the lowest possible score was 28. These two scales did not require the subject to indicate his name. Although the two experiments appeared to be unrelated, the back of the F Scale was coded, and data from this experiment was later matched up with the subject's data on previous measures.

A pilot project was done to determine the effectiveness of the manipulations and procedures. Subjects were interviewed at the end of the experiment, and apparently the deception was succesful. However, the sample for the pilot study was not representative of the experimental sample, as all low ethnic subjects had to be used in the main study.

Results

The major results of the research are summarized in Table 1 (data analyses are in Appendix L). Group means for attitude measures are presented in Tables 2 to 5. Correlation coefficients for the dependent variables are presented in Table 6.

Considering first the effects of ethnicity (E), analysis of variance results indicate that the low ethnic group scored significantly higher ($F = 18.44$, df 1 and 52, $p < .01$) on the F Scale, and are therefore more authoritarian than the high ethnic group (see Table 7). However, no significant differences were found between high and low ethnic groups either on the Confederate Evaluation scale (see Table 8) or on the rating scales used to assess attitudes towards the Administration (see Table 9) or towards the Black Students (see Table 10).

Analysis of variance results also indicate that the high education (ed) group evaluated the Administration more favorably ($F = 6.553$, df 1 and 52, $p < .05$) than the low education group. The reverse was true for the ratings of the Black Students ($F = 4.287$, df 1 and 52, $p < .05$). As the high education group did not differentiate greatly between their evaluations of the Black Students and the Administration, these results are probably accounted for by the differential ratings of the low education subjects, who tended to rate the Administration unfavorably and the Black Students favorably.

High education subjects also tended to differentiate between the white and Negro confederates in favor of the latter, while the low education group did not.

The difference between these two groups, however, shows only a trend towards significance ($F = 3.623$, df 1 and 52, $p. < .10$). Education had no significant effects on F Scale scores.

Significance was not found for the interaction between ethnicity and education (E x ed), nor for that between education and gender (ed x G) on any dependent variable. However, a significant gender effect was found on the Confederate Evaluation scale. Females ($F = 9.25$, df 1 and 52, $p. < .01$) evaluated both confederates more favorably than did males.

The interaction between ethnicity and gender (E x G) shows a trend toward significance on the Confederate Evaluation scale ($F = 3.418$, df 1 and 52, $p < .10$), while no significance was found on any other scale. High ethnic females and low ethnic males tended to over-rate the Negro confederate, while the low ethnic females and the high ethnic males tended not to differentiate between the two confederates (see Figure 1).

The only significant interaction between ethnicity, education and gender (E x ed x G) was found on F Scale scores ($F = 5.83$, df 1 and 52, $p < .05$). The high ethnic high education males and the low ethnic low education males scored higher of the F Scale than did the corresponding female groups, while the high ethnic low education females and the low ethnic high education females scored higher than the corresponding males. This relationship is shown most clearly in Figure 2.

All possible correlations between scales (except for that between the Administration rating scale and the Confederate Evaluation scale) were computed (see Table 6). A significant relationship was found only between scores on the F and Administration rating scales ($r = +.59$, $p < .01$).

Tests of the status incongruity model, in which status congruous and incongruous groups were compared, were also made on the F Scale and the Confederate Evaluation scale. The results of these tests are presented in Tables 11 and 12 respectively. Two comparisons between the mean scores of status congruous and incongruous males, and two comparisons between the mean scores of status congruous and incongruous females were made on each dependent variable. t test results indicate that the low ethnic high education females tended to be more authoritarian than low ethnic low education females ($t=2.015$, df 8, $p<.10$). No significant differences between means were found either on the F Scale or on the Confederate Evaluation scale.

In summary, the results show differences between the reactions of high and low education groups on the Confederate Evaluation scale, as well as in their evaluations of the Administration and the Black Students. High and low ethnic groups were found to differ only on F Scale scores.

Discussion

Data relevant to status incongruity theory

The results of the present study are not consistent with the findings of previous reserach. It was hypothesized that subjects with a paternal incongruity pattern of low ethnic and high educational status factors will be much less prejudiced and authoritarian, while those with a paternal incongruity configuration of high ethnic and low educational status components will be somewhat more prejudiced and authoritarian than expected on the basis of the additive effects of status factors. As neither the ethnicity by education interaction, nor the tests of specific hypotheses showed significance, this research provides no evidence for the status incongruity model. Status discrepant individuals, regardless of the particular pattern of paternal status components, were found not to differ significantly in extent of stereotyping nor in degree of authoritarianism. However, as the attitudinal effects of ethnicity and education alone were not consistently significant on the different measures, the results have also failed to support the additive model.

Nevertheless, certain predictions concerning the effects of individual status factors were supported by the data. As expected (Adelson, 1958; MacKinnon & Centers, 1956; Steckler, 1957), minority group members were found to be more authoritarian than subjects with a high ethnic background, although ethnicity was not found to be a relevant status variable in the prediction of attitudes toward Negroes, the Administration or the Black Students.

Even though significant correlation coefficients between authoritarianism and ethnocentrism were reported by Adorno et al. (1950), the relationship between these two scales was established only for white Anglo-Saxon Protestants, and not for minority group members.

The fact that no significant correlation was found between the Confederate Evaluation and F Scale scores raises the possibility that no such relationship exists for low ethnic groups. As the F Scale has been found to measure a number of different factors (Camilleri, 1959; Krug & Moyer, 1961), the absence of a relationship may mean that persons with a low ethnic background may differ from those with a high ethnic background on the following factors: conventionalism, submissiveness, projectivity, opposition to the imaginative, concern with sexual matters and the dominance - submissiveness relationship.

Another possible explanation for the lack of a significant correlation between Confederate Evaluation and F Scale scores is that scores for Adorno et al.'s subjects were obtained on two abstract scales, while in this experiment, ratings on the Confederate Evaluation scale consisted of evaluating specific individuals - the Negro and white confederates. Therefore, the two methods of assessing attitudes toward minority groups are not comparable. A third possibility is that as only one group (low ethnic, high education females) out of eight scored in the upper half of the F Scale, the range of scores was thus only about half that of Adorno et al.'s data, and consequently, the narrower range may have restricted any possible correlation.

The significant positive correlation between scores on the F Scale and the Administration rating scale indicated that both these measures were concerned with assessing attitudes toward authority and dominance. It appears that subjects with

authoritarian characteristics tended to favorably evaluate the Administration.

Although not predicted, gender differences were found to affect the evaluations of both the Negro and the white confederates. Females were found to rate both more positively than did males. These results are, however, consistent with the Kohn & Fiedler (1961) findings, which showed that females are less critical, and are generally more favorable in their evaluation of others.

No gender interactions were expected, however, the interactions between ethnicity and gender on the Confederate Evaluation scale showed a trend towards significance, and that between ethnicity, education and gender of the F Scale reached significance. Although these are interesting, the implications for the theory are not clear and replication is needed due to the possibility of sampling bias.

Even though no significant relationship was found to exist between education and authoritarianism, the differential effects of paternal education, as seen in the evaluation of the Negro confederate, were in accordance with the predictions. Subjects with high paternal education differentiated between the white and Negro confederates in favor of the latter, while the low paternal education subjects did not. This difference between the two groups, however, shows only a trend toward significance ($p < .10$).

Ambiguity arises in the interpretation of this finding, as a total absence of prejudice would have been indicated by equivalent evaluations of both confederates. Therefore, the relationship between paternal education and intolerance is not clear cut, as, "a good case may be made for denying the existence of such a difference (between high and low education groups) beyond mere verbalization, since those with more education may be expected to qualify their statements more carefully, while their underlying attitudes and behavior may be the same as that of

persons who express themselves more bluntly and thus appear more intolerant," (Bettelheim & Janowitz, 1964, p. 153). As data obtained on the relationship between education and attitudes towards Negroes may be relevant only for verbalizations, further behavioral study is needed to clarify the nature of the education -prejudice relationship.

To summarize briefly, the results of this study found no evidence for either the status incongruity model or the additive model.

Additional findings

Evidence from studies on parental child rearing techniques suggests that individuals with high paternal education may differ from those with low paternal education in the acceptance of authority. Bronfenbrenner (1958) found that middle class families (to which the high education group belong [Krech, Crutchfield & Ballachey, 1962, pp. 313-320]) are permissive and punish by means of love withdrawal. Lower class (low education) parents tend to be more strict, and more frequently use physical punishment. Harsh discipline creates fear, and produces strong aggressive needs and a hostile world outlook (Hoffman, 1968; Mussen & Conger, 1956). The attitudes of the low education group toward the Administration may reflect this hostility, while their attitudes toward the Black Students may show sympathy with the latter's rebellion against authority.

The middle class technique of love withdrawal, however, creates attempts to please the parents. This attitude towards authority produces less need for aggressive expression, and therefore greater acceptance of legitimate authority. Presumably, the high paternal education group were less favorably impressed by the Black Students rebelling against what they felt was legitimate authority. As the high paternal education group was found to evaluate the Administration more favorably than the

low paternal education group, while the reverse was found to be the case in ratings of the Black Students, this explanation seems plausible.

Since the low paternal education group evaluated the Black Students more positively and the Negro confederate less favorably than the high paternal education group, it is probable that the subjects were considering issues, rather than the color of the Black Students. On the one hand, subjects were evaluating an individual while on the other, they were rating a distinct group - the Black Students. This may account for the seemingly discrepant findings. However, as the racial conflict between some students and the university administration had just occured before the time of testing, it is difficult to be certain that this issue did not influence the evaluations of the Negro confederate. It is possible, as race was such a salient issue, that subjects tended to differentiate between the white and Negro confederates in favor of the latter in order to appear more liberal. Table 2 indicates that when subjects did differentiate between the two confederates, it was generally in favor of the Negro.

Criticisms

The inconsistency between predictions and results may be due to a number of factors. First, the success of deception studies and the effectiveness of the manipulation is always questionable to a certain extent in such experimentation (Orne, 1962). Second, the conflict between the black students and the administration was very recent, and therefore extremely important at the time of testing.

Another relevant item is the social class of the Negro university student. The global stereotypes of the nineteen forties are no longer in vogue (Gilbert, 1951), and both lower and middle class whites have been found to differentiate among upper, middle and lower class Negroes (Westie &Westie, 1957). Bayton, MacAlister &

Hamer (1956)have shown that college students are more likely to stereotype as a function of social class, rather than race. Their subjects labeled both upper class whites and upper class Negroes as intelligent, ambitious, industrious, and progressive, while they stereotyped lower class whites and lower class Negroes as ignorant, lazy, loud and physically dirty.

Since the subjects of this experiment were led to believe that the two confederates were also students, the stereotypes applied to Negroes in general (most of whom belong to the lower class [Dreger & Miller, 1968]) are not necessarily applicable to the Negro university student.

Another line of research also supports this argument. Are Negroes rejected on the basis of race or belief? Contradictory results found by Stein, Hardyck & Smith (1965) and Triandis (1961) were resolved by Triandis & Davis' (1965) data, which showed that rejection is due to racial differences in the case of intimate behaviors, while in non-intimate situations, rejection is due to beliefs and value dissimilarities. To the extent that the Negro college student is perceived as holding attitudes similar to the subject's, he is not liable to unfavorable stereotypes accorded to lower class Negroes, whose values and beliefs are presumed to differ from those of the subjects.

Another factor is the homogeneity of the subjects' own educational status, as the effects of their high education may have drastically reduced the variance of scores on the Confederate Evaluation and the F Scales. Also, due to their own educational status, both the low ethnic (Handlin & Handlin, 1956) and the low education (Brown, 1965, p. 105) groups are upwardly mobile, while both status congruous groups are at least attaining the paternal level. Downward mobility is positively related to anti-Semitism and anti-Negro attitudes (Bettelheim & Janowitz, 1964, p.254). As none of the subjects in the experimental groups were downwardly mobile, anti-Negro

sentiments were probably less pronounced than those in the population at large.

Another relevant status variable is religion, as both denominational preference and degree of commitment (Allport & Ross, 1967) are influential factors in determining prejudice levels and authoritarianism. Catholics tend to be more intolerant and authoritarian than Protestants (Bettelheim & Janowitz, 1964, p. 154; Rhodes, 1960-61). As the low ethnic sample contained 85% Catholics, while the high ethnic sample contained only 21%, the confounding effects of religion cannot be assessed, since it was impossible to control for this variable due to sample limitations.

Conclusions

This reserach neither supports nor repudiates the status incongruity model as it relates to attitudes. This may be due to the previously mentioned factors which could have influenced the results.

A more adequate test for the theory might be a modified version of the Sampson (1969) studies in which degree of status incongruity was manipulated by assigning tasks of varying degrees of responsibility to students of different levels of education. His results were based on the assessment of productivity and the degree of satisfaction each student derived from participating in the group. However, certain modifications are recommended.

An adult sample should be used, as it is difficult to assess the personal socio-economic status of university students, even though the influence of various status factors is great in the development and maintenance of attitudes and social behavior. Thus, samples should be selected on the basis of various socio-economic status factors (such as ethnic background, education, occupation and income), controlling for the effects of age, religion, vertical mobility and aspiration level (which is not adequately integrated either in the additive or the incongruity models), and then further varying status incongruity behaviorally in a salient fashion.

Perhaps a group task, in which some subjects are provided with information relevant to the solution and deprived of a vote, or vice versa, is a feasible manipulation. As prejudice is not adequately measured by looking at attitudes, Negroes may be included in the group. This way, a behavioral index of intolerance can be obtained by counting the number and type of communications addressed to the Negro subjects, and by determining the degree of satisfaction derived from participating in this group. This approach would integrate the status incongruity research performed on attitudes, which is often inadequate in predicting behavior, with studies performed by experimentally manipulating status incongruity, which often use trivial variables and neglect the socio-economic status factors, thus ignoring their behavioral consequences.

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APPENDICES

APPENDIX A

SOCIO - ECONOMIC BACKGROUND QUESTIONNAIRE

The following questionnaire is a survey of the background and general attitudes of Sir George Williams University psychology students. Please answer all questions. If you are not sure of an answer, please attempt it anyway.

Your co-operation in filling out this questionnaire is greatly appreciated.

1. Name _____
2. Address _____
3. Telephone number _____
4. Sex _____
5. Age _____
6. Year enrolled in _____
7. Future degree _____
8. Country of birth _____
9. Are you a Canadian citizen _____
10. How long have you lived in Canada ? _____
11. What is your ethnic origin ? _____
12. What religion were you born into ? _____
13. What religion do you practice ? _____
14. Do you live with your parents during the school year ? _____
15. Is your father alive ? _____
16. Where was he born ? _____

APPENDIX A - Continued

17. How many years of education does he have ? _____

18. What degrees and certificates does he have ? _____

_____

19. Is he self employed ? _____

20. What is his occupation ? (be explicit) _____

21. What type of company is he working for ? _____

22. How large is the company ? _____

23. What are his work duties and responsibilities ? _____

_____

24. What is his yearly income ? _____

25. Is your mother alive ? _____

26. Where was she born ? _____

27. How many years of education does she have ? _____

28. What degrees and certificates does she have ? _____

29. Is she self employed ? _____

30. What is her occupation ? _____

31. What type of company does she work for ? _____

32. How large is the company ? _____

33. What are her work duties and responsibilities ? _____

34. What is her yearly income ? _____

APPENDIX B
APPARATUS

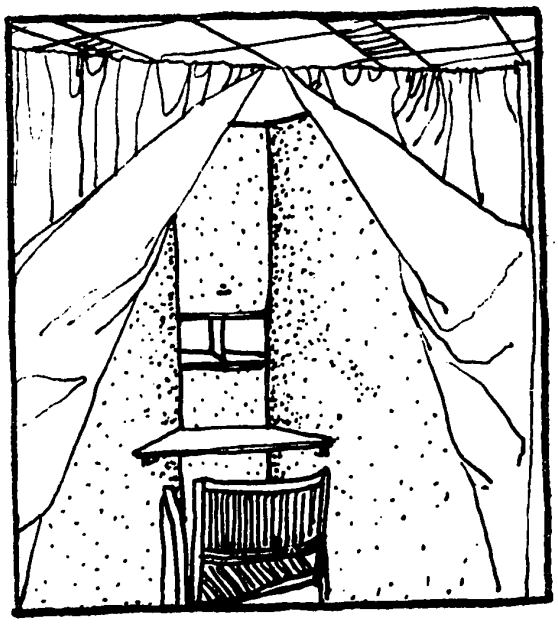


Plate 1. Subject's booth

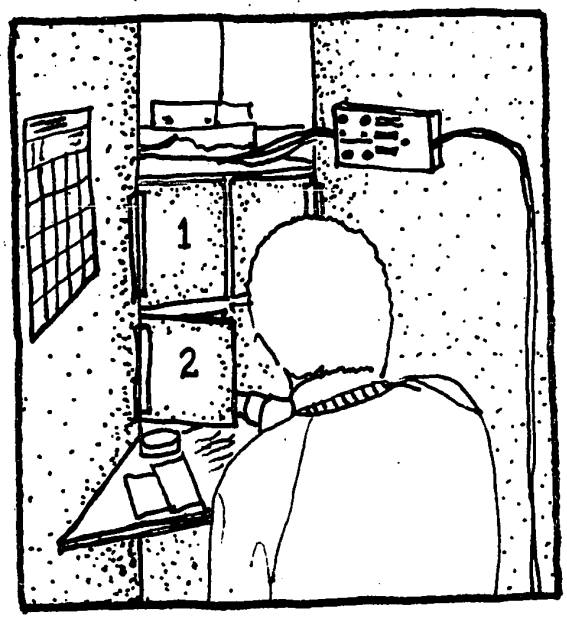


Plate 2. Confederate's booth

Plate 3. Subject with lower slots

Plate 4. Subject receiving message

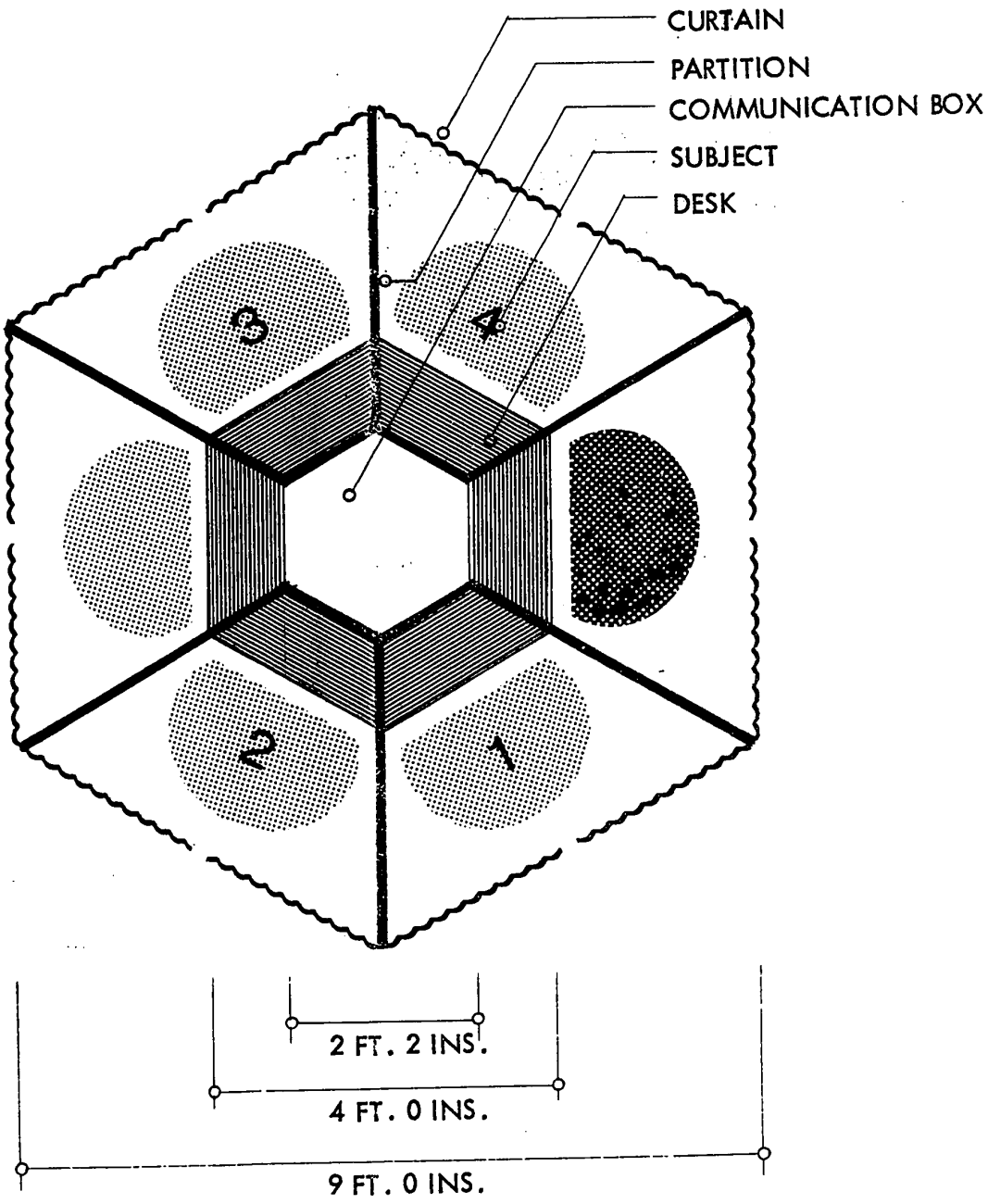
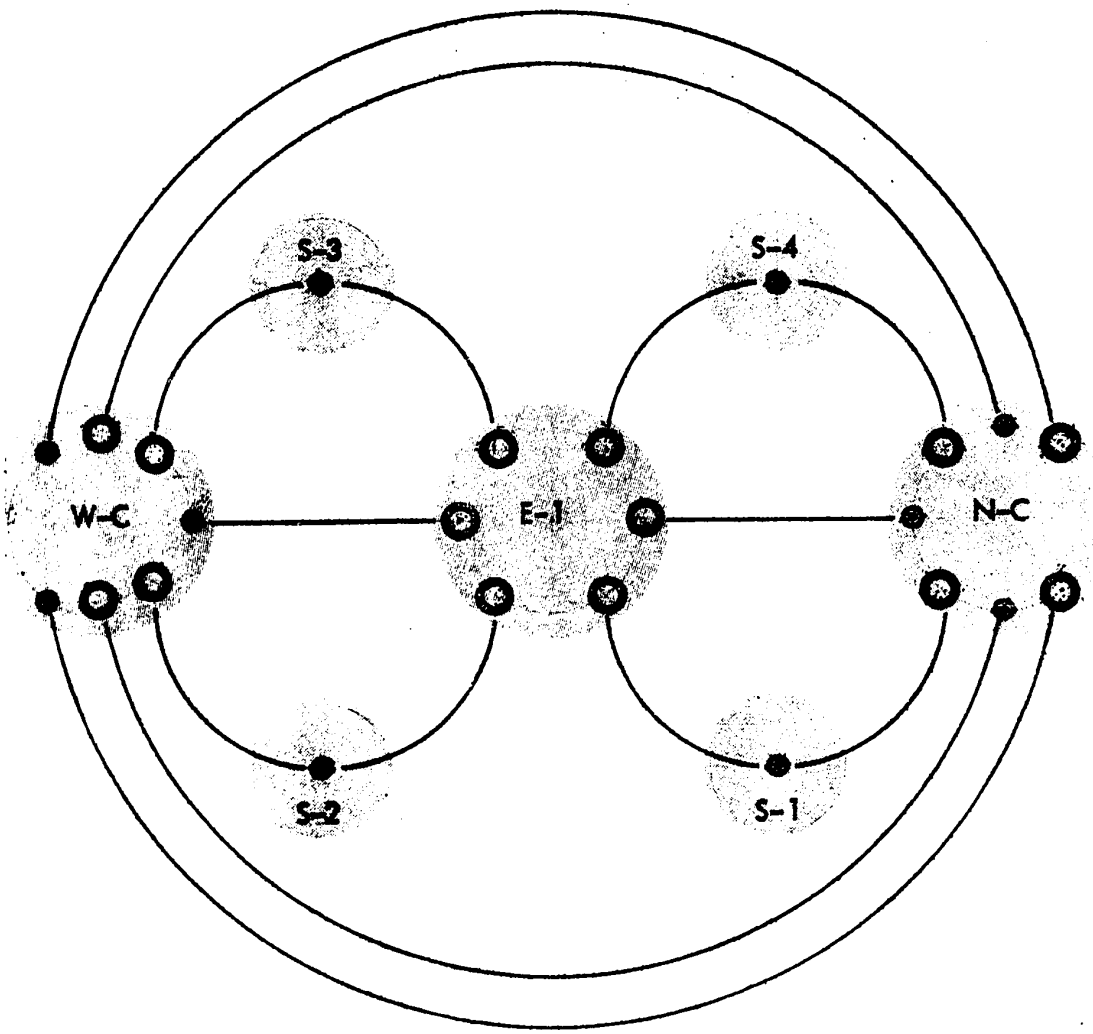


Plate 5. Plan; scale 1/2 in. = 1 ft. 0 ins.



LIGHT

BUTTON

Plate 6. Schematic signaling system

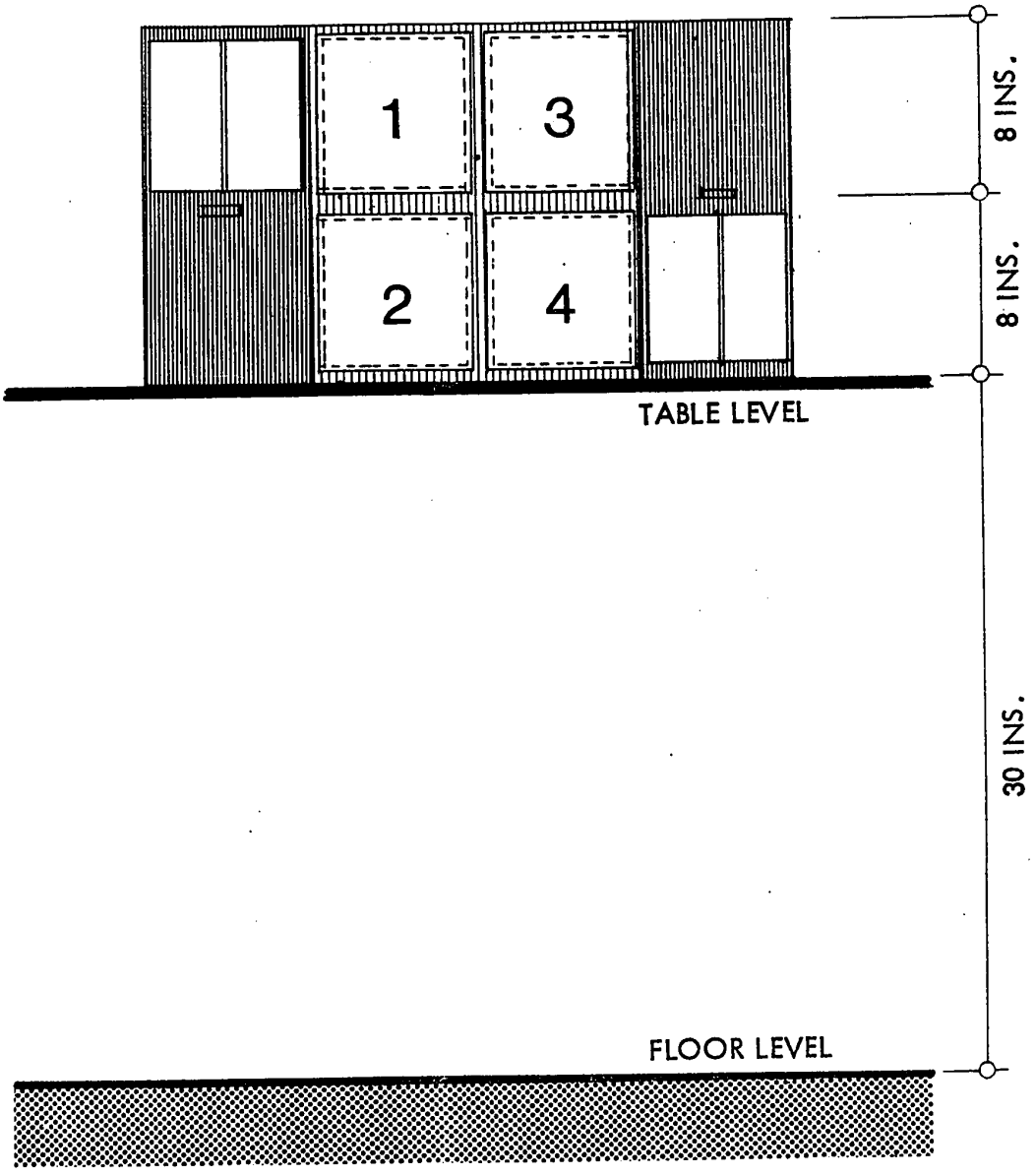


Plate 7. Elevation of two-level communication box

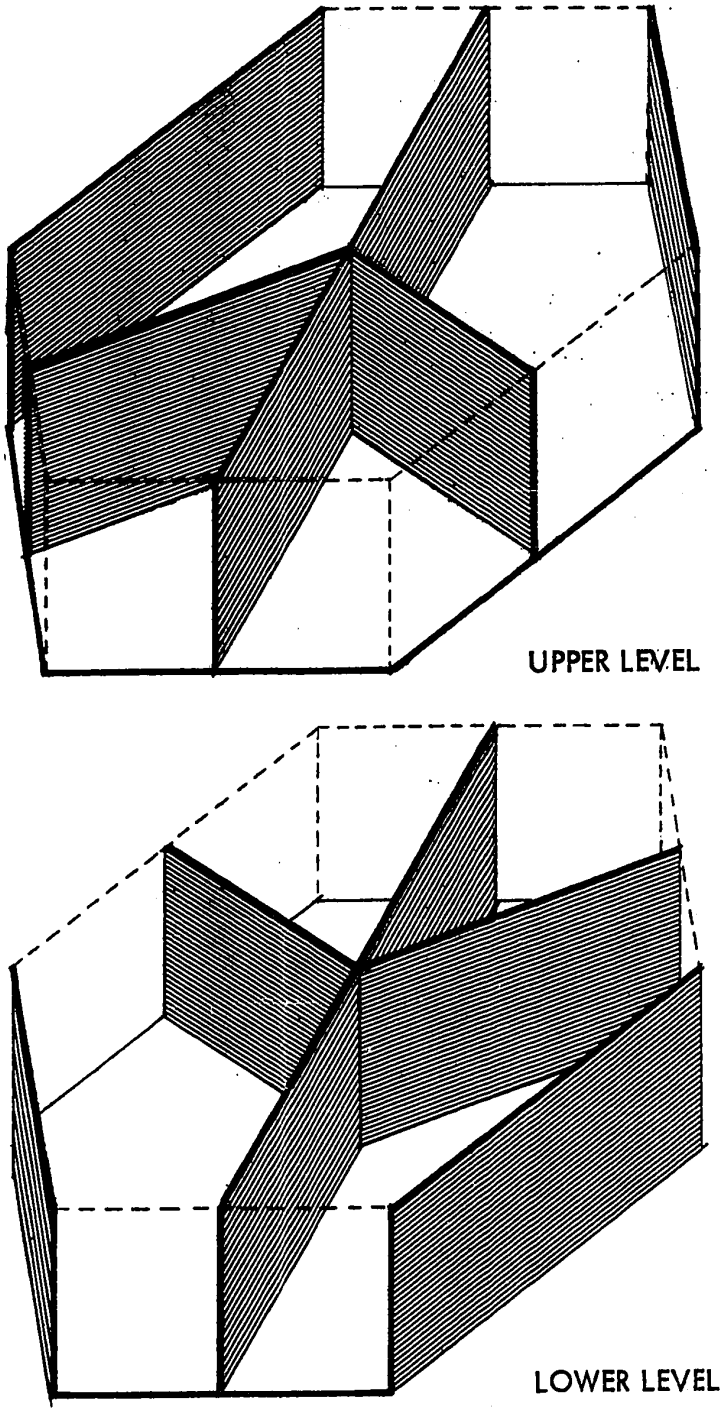


Plate 8. Isometric view of two-level communication box

APPENDIX C

INSTRUCTIONS FOR CRYPTOGRAMS

NAME_____
please print

Your name has been selected at random from Sir George Williams University psychology students to participate in an experiment studying problem solving efficiency. The purpose of this study is to find out whether an individual is more effective in solving a problem when he has help from others, or when he works alone.

You have been assigned to the group situation, and therefore you will give to and receive help from two other subjects, also randomly selected from Sir George Williams psychology students.

Stapled to this sheet are instructions and the problem itself. In front of you there is scratch-paper, and a sheet of carbon paper.

The other two subjects have also been given the same problem to solve. Both of them have been instructed to pass to you one message each to help you solve the problem, and you are also to pass to each of them a copy of a message that you will make up to help them. In order to speed things up, you will use the carbon paper to duplicate your message, so that you can pass a copy of it to both of them.

You will have 15 minutes after having read this sheet to prepare the two copies of your message. After you have written the two messages, fold each of them in two, and then wait for the other two subjects to pass you their message. They will also do this 15 minutes after you have finished reading this sheet. When a subject passes you a message, place one copy of your message into his hand.

To recapitulate, two other subjects will pass you one message each, and you will pass a copy of your message into the hand of each. The messages from the group members must be read.

You will have exactly 25 minutes in which to solve the problem after you have finished reading this sheet. Should you not be able to complete the problem, please mark down on the attached sheet whatever partial solution you may have by the end of the 25 minutes.

Please take nothing out of the experimental room, and do not talk to anyone concerning the experiment for another month. Concentrate on solving the problem, and please do not talk to anyone. This is very important. Should you have any difficulties, please press the button on your control panel in front of you by pressing - releasing - pressing - releasing for thirty seconds. A signal light will flash near the experimenter, and she will come over to you.

As soon as you will have finished reading these instructions, please press down on the button in front of you for thirty seconds to signal the other subjects

that you are ready to begin solving the problem. As soon as you take your finger off the button, mark down the time, and give yourself exactly 25 minutes to work on the problem.

After the 25 minutes are up, press down on the button for thirty seconds to signal the experimenter that you have finished.

Press down on the button for thirty seconds now, then start working on the problem.

PLEASE DO NOT WRITE ON MESSAGES PASSED BY OTHER SUBJECTS.

APPENDIX D

CRYPTOGRAMS

Starting time: _____

The following is a cryptogram in which each letter group represents a word. Each letter of the alphabet is always represented by the same code letter, and the probelm is to discover which letter represents which. By substituting the solution letter for the code letter in each case, the message is solved. This is not too difficult to do, and there are various techniques which may help you. For instance, in the English language, E is the most frequent, T the next most frequent, and then A. The commonest letters in the code message are likely to represent one of these letters. Then, certain combinations of letters are common in English. For instance, TH is the commonest two letter combination. Finally, having deciphered some of the letters in a word, the others may fall into place. For example, in the word T-E, the middle letter could only be H, O, I or E, and the context may make clear which letter should be inserted.

APPENDIX D - Continued

CRYPTOGRAM I

Below is a sentence in code. Each letter of the alphabet is always represented by the same code letter.

MLW ISWYSQN NLLN YHCY MLWYDNS TRBY YL MTSS, YHSW VCQ

_____

NL VCN YHS ILDWB LM HRWS GRYHHLTOS.

_____

APPENDIX D - Continued

CRYPTOGRAM II

Below is a sentence in code. Each letter of the alphabet is always represented by the same code letter.

VNH GSHMSTE ENNE MACM VNHMDES BXIM MN VBSS, MASH YCT

_____

EN YCE MAS GNDHI NV AXHS ZXMAANBQS.

_____

APPENDIX E

MESSAGE AND HANDWRITING SAMPLES

Using the word NLLN, it can be shown that N has to be N, and L has to be O. Therefore the word NL is NO.

Cryptogram I, message "b", handwriting 2

on the words MN, EN, NV, N must = O
and M or E must = D, G, N, S or T and
V must = N, H, F, or R.

Cryptogram II, message "a", handwriting 1.

APPENDIX F

HANDWRITING EVALUATION

The purpose of this questionnaire is to guide us in evaluating 8 handwriting samples by having you rate each one against a series of descriptive scales. In taking this test, please make your judgments on the basis of how you evaluate each one. You are to rate each handwriting sample on each of the scales in order.

Here is how you are to use the scales.

If you feel that it is extremely well described by one end of the scale, you should place your check mark as follows :

heavy __X__ : _____ : _____ : _____ : _____ : _____ light

or

heavy _____ : _____ : _____ : _____ : _____ : X light

If you feel that it is moderately well described by one end of the scale (but not extremely well), you should place your check mark as follows :

heavy _____ : X : _____ : _____ : _____ : _____ light

or

heavy _____ : _____ : _____ : _____ : X : _____ light

If it is only slightly described by one side as opposed to the other side, then you should check as follows :

heavy _____:_____:__X__:_____:_____:_____ light

or

heavy _____:_____:_____:__X__:_____:_____ light

IMPORTANT

1. Place your check marks in the middle of spaces, not on the boundaries

			this		not this
_____	: _____	: _____	: X	: _____	X _____

2. Be sure you check every scale - do not omit any.

3. Never put more than one check mark on a single scale.

Sometimes you may feel as though you've had the same item before on the test. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in the test. Make each item a separate and independent judgment. Work at fairly high speed through this test. Do not worry or puzzle over individual items. It is your first impression, the immediate "feelings" about the items that we want. On the other hand, please do not be careless because we want your true impressions.

2. Finally, but before she had tested all the bones she lost interest. She threw the last one down impatiently and tipped the mess out of the window, not caring where it fell.

quiet	_____:_____:_____:_____:_____:_____	loud
creative	_____:_____:_____:_____:_____:_____	unoriginal
independent	_____:_____:_____:_____:_____:_____	dependent
lazy	_____:_____:_____:_____:_____:_____	diligent
unintelligent	_____:_____:_____:_____:_____:_____	intelligent
low standards	_____:_____:_____:_____:_____:_____	high standards
neat	_____:_____:_____:_____:_____:_____	sloppy
immoral	_____:_____:_____:_____:_____:_____	moral
dull	_____:_____:_____:_____:_____:_____	bright
fast	_____:_____:_____:_____:_____:_____	slow
dirty	_____:_____:_____:_____:_____:_____	clean
helpful	_____:_____:_____:_____:_____:_____	unhelpful
honest	_____:_____:_____:_____:_____:_____	dishonest
materialistic	_____:_____:_____:_____:_____:_____	idealistic
uninformed	_____:_____:_____:_____:_____:_____	informed

APPENDIX F - Continued

unattractive	_____:_____:_____:_____:_____:_____	attractive
good upbringing	_____:_____:_____:_____:_____:_____	bad upbringing
ambitious	_____:_____:_____:_____:_____:_____	unambitious
passive	_____:_____:_____:_____:_____:_____	active
trustworthy	_____:_____:_____:_____:_____:_____	untrustworthy
sociable	_____:_____:_____:_____:_____:_____	unsociable
unpleasant	_____:_____:_____:_____:_____:_____	pleasant
valuable	_____:_____:_____:_____:_____:_____	worthless
progressive	_____:_____:_____:_____:_____:_____	reactionary
ostentatious	_____:_____:_____:_____:_____:_____	unostentatious
rude	_____:_____:_____:_____:_____:_____	courteous
strong	_____:_____:_____:_____:_____:_____	weak
naive	_____:_____:_____:_____:_____:_____	sophisticated
inefficient	_____:_____:_____:_____:_____:_____	efficient
good	_____:_____:_____:_____:_____:_____	bad
superstitious	_____:_____:_____:_____:_____:_____	unsuperstitious
reliable	_____:_____:_____:_____:_____:_____	unreliable
cultured	_____:_____:_____:_____:_____:_____	uncultured
uninteresting	_____:_____:_____:_____:_____:_____	interesting

2. Finally, but before she had tested all the bones she lost interest. She threw the last ones down impatiently and tipped the mess out of the window, not caring where it fell.

quiet	_____:_____:_____:_____:_____:_____	loud
creative	_____:_____:_____:_____:_____:_____	unoriginal
independent	_____:_____:_____:_____:_____:_____	dependent
lazy	_____:_____:_____:_____:_____:_____	diligent
unintelligent	_____:_____:_____:_____:_____:_____	intelligent
low standards	_____:_____:_____:_____:_____:_____	high standards
neat	_____:_____:_____:_____:_____:_____	sloppy
immoral	_____:_____:_____:_____:_____:_____	moral
dull	_____:_____:_____:_____:_____:_____	bright
fast	_____:_____:_____:_____:_____:_____	slow
dirty	_____:_____:_____:_____:_____:_____	clean
helpful	_____:_____:_____:_____:_____:_____	unhelpful
honest	_____:_____:_____:_____:_____:_____	dishonest
materialistic	_____:_____:_____:_____:_____:_____	idealistic
uninformed	_____:_____:_____:_____:_____:_____	informed

APPENDIX F - Continued

unattractive	_____:_____:_____:_____:_____:_____	attractive
good upbringing	_____:_____:_____:_____:_____:_____	bad upbringing
ambitious	_____:_____:_____:_____:_____:_____	unambitious
passive	_____:_____:_____:_____:_____:_____	active
trustworthy	_____:_____:_____:_____:_____:_____	untrustworthy
sociable	_____:_____:_____:_____:_____:_____	unsociable
unpleasant	_____:_____:_____:_____:_____:_____	pleasant
valuable	_____:_____:_____:_____:_____:_____	worthless
progressive	_____:_____:_____:_____:_____:_____	reactionary
ostentatious	_____:_____:_____:_____:_____:_____	unostentatious
rude	_____:_____:_____:_____:_____:_____	courteous
strong	_____:_____:_____:_____:_____:_____	weak
naive	_____:_____:_____:_____:_____:_____	sophisticated
inefficient	_____:_____:_____:_____:_____:_____	efficient
good	_____:_____:_____:_____:_____:_____	bad
superstitious	_____:_____:_____:_____:_____:_____	unsuperstitious
reliable	_____:_____:_____:_____:_____:_____	unreliable
cultured	_____:_____:_____:_____:_____:_____	uncultured
uninteresting	_____:_____:_____:_____:_____:_____	interesting

APPENDIX G

IDEALIZED TIME AND MOTION STUDY OF EXPERIMENTAL MANIPULATIONS

TIME	ACTION	
0:00:00	N-C	and W-C are in place
0:00:00	S-1	arrives and checked-in by E-1
0:00:30	S-1	is led to seat 1
0:01:00	S-1	reads instructions for 5 minutes
0:04:00	S-2	arrives and checked-in by E-1
0:04:30	S-2	is led to seat 2
0:05:00	S-2	reads instructions for 5 minutes
0:06:00	S-1	signals N-C to start timer
0:08:00	S-3	arrives and checked-in by E-1
0:08:30	S-3	is led to seat 3
0:09:00	S-3	reads instructions for 5 minutes
0:10:00	S-2	signals W-C to start timer
0:12:00	S-4	arrives and checked in by E-1
0:12:30	S-4	is led to seat 4
0:13:00	S-4	reads instructions for 5 minutes
0:14:00	S-3	signals W-C to start timer
0:18:00	S-4	signals N-C to start timer
0:21:00	S-1	and N-C exchange messages (gets Crypt. I, HW-2, M-a)
0:21:30	N-C	signals W-C
0:22:00	S-1	and W-C exchange messages (gets Crypt. I, HW-1, M-b)

APPENDIX G - Continued

TIME	ACTION	
0:25:00	S-2	and W-C exchange messages (gets Crypt. II, HW-1, M-a)
0:25:30	W-C	signals N-C
0:26:00	S-2	and N-C exchange messages (gets Crypt. II, HW-2, M-b)
0:29:00	S-3	and W-C exchange messages (gets Crypt. II, HW-2, M-a)
0:29:30	W-C	signals N-C
0:30:00	S-3	and N-C exchange messages (gets Crypt. II, HW-1, M-b)
0:31:00	S-1	signals E-1
0:31:30	E-1	brings evaluation sheet to S-1
0:33:00	S-4	and N-C exchange messages (gets Crypt. I, HW-1, M-a)
0:33:30	N-C	signals W-C
0:34:00	S-4	and N-C exchange messages (gets Crypt. I, HW-2, M-b)
0:35:00	S-2	signals E-1
0:35:30	E-1	brings evaluation sheet to S-2
0:39:00	S-3	signals E-1
0:39:30	E-1	brings evaluation sheet to S-3
0:41:00	S-1	signals end of evaluation
0:41:30	E-2	leads S-1 to another room
0:42:00	S-1	fills out BS, A and F scales
0:43:00	S-4	signals E-1
0:43:30	E-1	brings evaluation sheet to S-4
0:45:00	S-2	signals end of evaluation

APPENDIX G - Continued

TIME	ACTION	
0:45:30	E-2	leads S-2 to another room
0:46:00	S-2	fills out BS, A and F scales
0:49:00	S-3	signals end of evaluation
0:49:30	E-2	leads S-3 to another room
0:50:00	S-3	fills out BS, A and F scales
0:51:00	S-1	finishes and leaves
0:53:00	S-4	signals end of evaluation
0:53;30	E-2	leads S-4 to another room
0:54:00	S-4	fills out BS, A and F scales
0:55:00	S-2	finishes and leaves
0:59:00	S-3	finishes and leaves
1:03:00	S-4	finishes and leaves

[a] All signals have a duration of 30 seconds.
[b] Signalling is achieved by means of push button and flashing light.
[c] Subjects see no one except experimenter.
[d] Legend :

N-C =Negro confederate
W-C =White confederate
E =Experimenter
S =Subject
Crypt.=Cryptogram
HW =Handwriting
M =Message
BS =Black Students rating scale
A =Administration rating scale
F =F Scale

APPENDIX H

CONFEDERATE EVALUATION SCALE

NAME_____
please print

The purpose of this questionnaire is to guide us in evaluating the type of help which you received from the subjects passing you suggestions from the two slots by having you rate each of them against a series of descriptive scales. In taking this test, please make your judgments on the basis of how you evaluate each. You are to rate each subject on each of the scales in order.

Here is how you are to use the scales:

If you feel that he is extremely well described by one end of the scale, you should place your check mark as follows:

heavy ___X___:_____:_____:_____:_____:_____ light

or

heavy _____:_____:_____:_____:_____:___X___ light

If you feel that he is moderately well described by one end of the scale (but not extremely well), you should place your check mark as follows:

heavy _____:___X___:_____:_____:_____:_____ light

or

heavy _____:_____:_____:_____:___X___:_____ light

If he is only slightly described by one side as opposed to the other side, then you should check as follows:

heavy _____ : _____ : X : _____ : _____ : _____ light

or

heavy _____ : _____ : _____ : X : _____ : _____ light

IMPORTANT

1. Place your check marks in the middle of spaces, not on the boundaries.

this not this

_____ : _____ : _____ : _____ : X X _____

2. Be sure you check every scale - do not omit any.

3. Never put more than one check mark on a single space.

Sometimes you may feel as though you've had the same item before on the test. This will not be the case, so do not look back and forth through the items. Do not try to remeber how you checked similar items earlier in the test. Make each item a separate and independent judgment. Work at fairly high speed through this test. Do not worry or puzzle over individual items. It is your first impression, the immediate feelings about the other subjects that we want. On the other hand, please do not be careless, because we want your true impressions.

APPENDIX H - Continued

SUBJECT PASSING YOU MESSAGE FROM THE SLOT ON YOUR RIGHT

quiet	_____:_____:_____:_____:_____:_____	loud
creative	_____:_____:_____:_____:_____:_____	unoriginal
independent	_____:_____:_____:_____:_____:_____	dependent
lazy	_____:_____:_____:_____:_____:_____	diligent
unintelligent	_____:_____:_____:_____:_____:_____	intelligent
low standards	_____:_____:_____:_____:_____:_____	high standards
neat	_____:_____:_____:_____:_____:_____	sloppy
immoral	_____:_____:_____:_____:_____:_____	moral
dull	_____:_____:_____:_____:_____:_____	bright
fast	_____:_____:_____:_____:_____:_____	slow
dirty	_____:_____:_____:_____:_____:_____	clean
helpful	_____:_____:_____:_____:_____:_____	unhelpful
honest	_____:_____:_____:_____:_____:_____	dishonest
materialistic	_____:_____:_____:_____:_____:_____	idealistic
uninformed	_____:_____:_____:_____:_____:_____	informed
unattractive	_____:_____:_____:_____:_____:_____	attractive
good upbringing	_____:_____:_____:_____:_____:_____	bad upbringing
ambitious	_____:_____:_____:_____:_____:_____	unambitious
passive	_____:_____:_____:_____:_____:_____	active
trustworthy	_____:_____:_____:_____:_____:_____	untrustworthy
sociable	_____:_____:_____:_____:_____:_____	unsociable
unpleasant	_____:_____:_____:_____:_____:_____	pleasant
valuable	_____:_____:_____:_____:_____:_____	worthless

APPENDIX H - Continued

progressive	_____:_____:_____:_____:_____:_____	reactionary
ostentatious	_____:_____:_____:_____:_____:_____	unostentatious
rude	_____:_____:_____:_____:_____:_____	courteous
strong	_____:_____:_____:_____:_____:_____	weak
naive	_____:_____:_____:_____:_____:_____	sophisticated
inefficient	_____:_____:_____:_____:_____:_____	efficient
good	_____:_____:_____:_____:_____:_____	bad
superstitious	_____:_____:_____:_____:_____:_____	unsuperstitious
reliable	_____:_____:_____:_____:_____:_____	unreliable
cultured	_____:_____:_____:_____:_____:_____	uncultured
uninteresting	_____:_____:_____:_____:_____:_____	interesting

APPENDIX H - Continued

SUBJECT PASSING YOU MESSAGE FROM THE SLOT ON YOUR LEFT

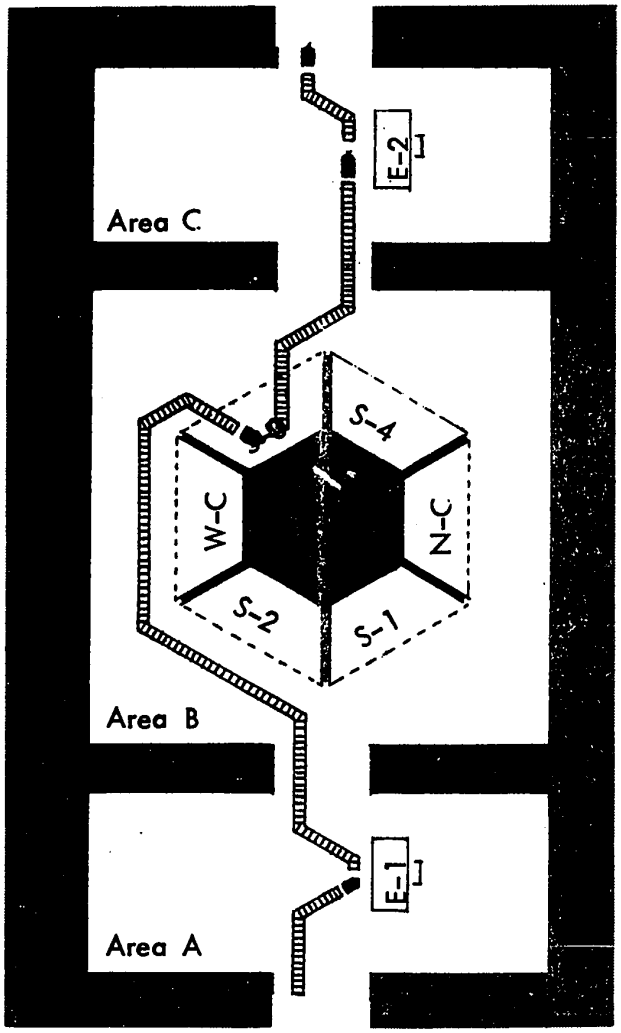
quiet	_____:_____:_____:_____:_____:_____	loud
creative	_____:_____:_____:_____:_____:_____	unoriginal
independent	_____:_____:_____:_____:_____:_____	dependent
lazy	_____:_____:_____:_____:_____:_____	diligent
unintelligent	_____:_____:_____:_____:_____:_____	intelligent
low standards	_____:_____:_____:_____:_____:_____	high standards
neat	_____:_____:_____:_____:_____:_____	sloppy
immoral	_____:_____:_____:_____:_____:_____	moral
dull	_____:_____:_____:_____:_____:_____	bright
fast	_____:_____:_____:_____:_____:_____	slow
dirty	_____:_____:_____:_____:_____:_____	clean
helpful	_____:_____:_____:_____:_____:_____	unhelpful
honest	_____:_____:_____:_____:_____:_____	dishonest
materialistic	_____:_____:_____:_____:_____:_____	idealistic
uninformed	_____:_____:_____:_____:_____:_____	informed
unattractive	_____:_____:_____:_____:_____:_____	attractive
good upbringing	_____:_____:_____:_____:_____:_____	bad upbringing
ambitious	_____:_____:_____:_____:_____:_____	unambitious
passive	_____:_____:_____:_____:_____:_____	active
trustworthy	_____:_____:_____:_____:_____:_____	untrustworthy
sociable	_____:_____:_____:_____:_____:_____	unsociable
unpleasant	_____:_____:_____:_____:_____:_____	pleasant
valuable	_____:_____:_____:_____:_____:_____	worthless

APPENDIX H - Continued

progressive	_____:_____:_____:_____:_____:_____	reactionary
ostentatious	_____:_____:_____:_____:_____:_____	unostentatious
rude	_____:_____:_____:_____:_____:_____	courteous
strong	_____:_____:_____:_____:_____:_____	weak
naive	_____:_____:_____:_____:_____:_____	sophisticated
inefficient	_____:_____:_____:_____:_____:_____	efficient
good	_____:_____:_____:_____:_____:_____	bad
superstitious	_____:_____:_____:_____:_____:_____	unsuperstitious
reliable	_____:_____:_____:_____:_____:_____	unreliable
cultured	_____:_____:_____:_____:_____:_____	uncultured
uninteresting	_____:_____:_____:_____:_____:_____	interesting

APPENDIX I

SCHEMATIC REPRESENTATION OF THE EXPERIMENTAL SITUATION

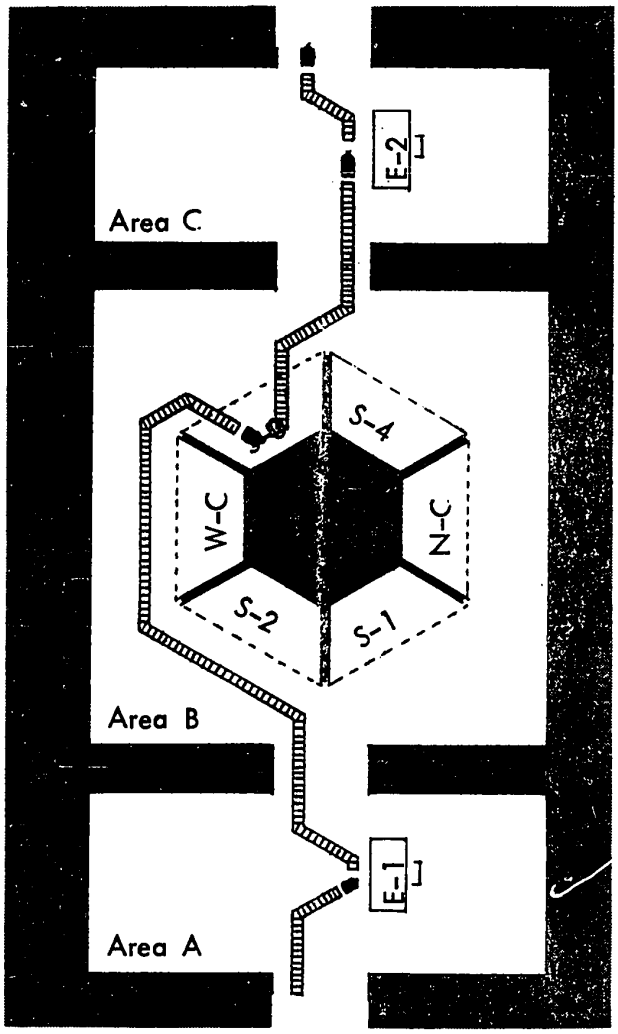


Legend

Area A	= Receiving area
Area B	= Experimental area
Area C	= Second experiment
E	= Experimenter
S	= Subject
N-C	= Negro confederate
W-C	= White confederate

APPENDIX I

SCHEMATIC REPRESENTATION OF THE EXPERIMENTAL SITUATION



Legend

Area A	= Receiving area
Area B	= Experimental area
Area C	= Second experiment
E	= Experimenter
S	= Subject
N-C	= Negro confederate
W-C	= White confederate

APPENDIX J

LOCAL ISSUES RATING SCALES

This technique is designed to assess the feeling and attitudes of Sir George Williams University students to the recent conflict between the administration and the black students.

For this purpose you are asked to judge each of a number of words against a set of twenty scales like the following

	Very	Somewhat	Slightly	Neither one nor other	Slightly	Somewhat	Very	
Difficult	1	2	3	4	5	6	7	Easy

Examples:

Suppose the concept is Courses. If you feel that on the scale "Difficult . . . Easy", Courses is very closely associated with "Easy" you would circle as follows:

	Very	Somewhat	Slightly	Neither one nor other	Slightly	Somewhat	Very	
Difficult	1	2	3	4	5	6	(7)	Easy

On the other hand if you feel that Courses is slightly associated with "Difficult", you would circle as follows:

	Very	Somewhat	Slightly	Neither one nor other	Slightly	Somewhat	Very	
Difficult	1	2	(3)	4	5	6	7	Easy

If Courses does not seem to you to be associated more with one end of the scale

then the other, you would circle as follows:

	Very	Somewhat	Slightly	Neither one nor other	Slightly	Somewhat	Very	
Difficult	1	2	3	(4)	5	6	7	Easy

There are no right or wrong answers. WORK RAPIDLY. Do not puzzle over individual items or worry about consistency in your judgements. Indicate your first reaction on each scale. Often a vague general impression will be all you have to go on. That is exactly what we want. Be sure to answer every item but circle one and only one value per item.

APPENDIX J -- Continued

BLACK STUDENTS

	Very	Somewhat	Slightly	Neither one nor other	Slightly	Somewhat	Very	
Just	1	2	3	4	5	6	7	Unjust
Passive	1	2	3	4	5	6	7	Active
Inferior	1	2	3	4	5	6	7	Superior
Safe	1	2	3	4	5	6	7	Dangerous
Soft	1	2	3	4	5	6	7	Hard *
Excitable	1	2	3	4	5	6	7	Calm *
Right	1	2	3	4	5	6	7	Wrong
Liberal	1	2	3	4	5	6	7	Conservative *
Severe	1	2	3	4	5	6	7	Lenient *
Timely	1	2	3	4	5	6	7	Untimely
Dull	1	2	3	4	5	6	7	Bright
Unfair	1	2	3	4	5	6	7	Fair
Radical	1	2	3	4	5	6	7	Reactionary *
Good	1	2	3	4	5	6	7	Bad
Harmful	1	2	3	4	5	6	7	Harmless
Justified	1	2	3	4	5	6	7	Unjustified
Unemotional	1	2	3	4	5	6	7	Emotional *
Slow	1	2	3	4	5	6	7	Fast
Conformist	1	2	3	4	5	6	7	Non-Conformist *
Reasonable	1	2	3	4	5	6	7	Unreasonable

*These items were not scored

APPENDIX J - Continued

ADMINISTRATION

	Very	Somewhat	Slightly	Neither one nor other	Slightly	Somewhat	Very	
Just	1	2	3	4	5	6	7	Unjust
Passive	1	2	3	4	5	6	7	Active
Inferior	1	2	3	4	5	6	7	Superior
Safe	1	2	3	4	5	6	7	Dangerous
Soft	1	2	3	4	5	6	7	Hard *
Excitable	1	2	3	4	5	6	7	Calm *
Right	1	2	3	4	5	6	7	Wrong
Liberal	1	2	3	4	5	6	7	Conservative
Severe	1	2	3	4	5	6	7	Lenient *
Timely	1	2	3	4	5	6	7	Untimely
Dull	1	2	3	4	5	6	7	Bright
Unfair	1	2	3	4	5	6	7	Fair
Radical	1	2	3	4	5	6	7	Reactionary *
Good	1	2	3	4	5	6	7	Bad
Harmful	1	2	3	4	5	6	7	Harmless
Justified	1	2	3	4	5	6	7	Unjustified
Unemotional	1	2	3	4	5	6	7	Emotional *
Slow	1	2	3	4	5	6	7	Fast
Conformist	1	2	3	4	5	6	7	Non-Conformis
Reasonable	1	2	3	4	5	6	7	Unreasonable

*These items were not scored

APPENDIX K

MODIFIED VERSION OF FORM 40 - 45 OF THE F SCALE

Please circle the number which indicates the extent to which you agree or disagree with an item.

strongly disagree	moderately disagree	slightly disagree	neutral	slightly agree	moderately agree	strongly agree
-3	-2	-1	0	+1	+2	+3

Circle only one number, and answer all options.

1. Obedience and respect for authority are the most important virtues children should learn.

-3 -2 -1 0 +1 +2 +3

2. No weakness or difficulty can hold us back if we have enough will power.

-3 -2 -1 0 +1 +2 +3

3. Science has its place, but there are many important things that can never possibly be understood by the human mind.

-3 -2 -1 0 +1 +2 +3

4. Human nature being what it is, there will always be war and conflict.

-3 -2 -1 0 +1 +2 +3

5. Every person should have complete faith in some supernatural power whose decisions he obays without question.

-3 -2 -1 0 +1 +2 +3

6. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.

-3 -2 -1 0 +1 +2 +3

7. A person who has bad manners, habits and breeding can hardly expect to get along with decent people.

-3 -2 -1 0 +1 +2 +3

8. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

-3 -2 -1 0 +1 +2 +3

9. Some people are born with an urge to jump from high places.

-3 -2 -1 0 +1 +2 +3

10. Nowadays when so many different kinds of people move around and mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.

-3 -2 -1 0 +1 +2 +3

11. An insult to our honour should always be punished.

-3 -2 -1 0 +1 +2 +3

12. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

-3 -2 -1 0 +1 +2 +3

13. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith.

-3 -2 -1 0 +1 +2 +3

14. Sex crimes, such as rape and attacks on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped, or worse.

-3 -2 -1 0 +1 +2 +3

15. People can be divided into two distinct classes: the weak and the strong.

-3 -2 -1 0 +1 +2 +3

16. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.

-3 -2 -1 0 +1 +2 +3

17. Some day it will probably be shown that astrology can explain a lot of things.

-3 -2 -1 0 +1 +2 +3

18. Nowadays more and more people are prying into matters that should remain personal and private.

-3 -2 -1 0 +1 +2 +3

19. Wars and social troubles may someday be ended by an earthquake or flood that will destroy the whole world.

-3 -2 -1 0 +1 +2 +3

20. Most of our social problems would be solved if we could somehow get rid of the immoral, crooked, and feebleminded people.

-3 -2 -1 0 +1 +2 +3

21. The wild sex life of the old Greeks and Romans was tame compared to some of the goings-on in this country, even in places where people might least expect it.

-3 -2 -1 0 +1 +2 +3

22. If people would talk less and work more, everybody would be better off.

-3 -2 -1 0 +1 +2 +3

23. Most people don't realize how much our lives are controlled by plots hatched in secret places.

-3 -2 -1 0 +1 +2 +3

24. Homosexuals are hardly better than criminals and ought to be severely punished.

-3 -2 -1 0 +1 +2 +3

25. The businessman and the manufacturer are much more important to society than the artist and the professor.

-3 -2 -1 0 +1 +2 +3

26. No sane, normal, decent person could ever think of hurting a close friend or relative.

-3 -2 -1 0 +1 +2 +3

27. Familiarity breeds contempt.

-3 -2 -1 0 +1 +2 +3

28. Nobody learned anything really important except through suffering.

-3 -2 -1 0 +1 +2 +3

APPENDIX L

DATA ANALYSES

APPENDIX L - Continued

TABLE 1

SUMMARY OF F VALUES IN ANALYSES OF VARIANCE WITH UNEQUAL N FOR ATTITUDE MEASURES

Independent Variables		Dependent Variables			
Source	df	F Scale	Admin.	Black Students	Confederate Evaluation [a]
E (Ethnicity)	1	18.44**	0.573	0.623	0.318
ed (Education)	1	1.06	6.553*	4.287*	3.623≠
G (Gender)	1	0.08	0.569	0.515	0.352
E x ed	1	0.36	0.152	0.101	0.448
E x G	1	0.02	0.288	2.368	3.418≠
ed x G	1	0.34	0.963	0.051	0.510
E x ed x G	1	5.83*	0.624	2.755	0.726
Error	52				

[a] These effects may be seen in the interactions between Test and the relevant independent variable in Table 8.

≠ $p < .10$.
* $p < .05$.
** $p < .01$.

APPENDIX L - Continued

TABLE 2

SUMMARY OF DIFFERENCES BETWEEN MEANS USED IN ANALYSIS OF VARIANCE WITH UNEQUAL N FOR THE CONFEDERATE EVALUATION SCALE

Source	Group	$\bar{X}$ [a]	SD [b]	Number of Ss [c]
E (Ethnicity)	hi E	1.92	20.18	33
	lo E	3.41	15.47	27
ed (Education)	hi ed	7.65	15.97	30
	lo ed	- 2.46	19.00	30
G (Gender)	M (Male)	- 1.91	17.71	38
	F (Female)	3.77	18.05	22
E x ed	hi E hi ed	8.59	15.08	17
	hi E lo ed	- 5.16	22.87	16
	lo E hi ed	6.42	17.62	13
	lo E lo ed	0.61	11.57	14
E x G	hi E M	- 1.40	21.12	21
	hi E F	7.73	17.60	12
	lo E M	5.99	11.67	17
	lo E F	- 0.99	20.70	10
ed x G	hi ed M	3.76	11.76	19
	hi ed F	10.38	21.85	11
	lo ed M	- 2.25	21.67	19
	lo ed F	- 2.83	14.18	11
E x ed x G	hi E hi ed M	5.91	8.80	11
	hi E hi ed F	13.50	22.97	6
	hi E lo ed M	- 9.43	27.72	10
	hi E lo ed F	1.97	9.35	6
	lo E hi ed M	6.29	15.66	8
	lo E hi ed F	6.62	22.40	5
	lo E lo ed M	5.73	7.46	9
	lo E lo ed F	- 8.60	20.01	5

[a] Differences between the means of the Negro and white confederate evaluations. The higher the score, the more favorable the evaluation of the Negro confederate. These effects may be seen in the interactions between Test and the relevant independent variable in Table 8.

[b] Standard deviation.

[c] Total N = 60.

[d] The male ratings of combined Negro and white confederate evaluations = 149.81, mean female ratings = 154.54. The higher the score, the more favorable the evaluation.

APPENDIX L - Continued

TABLE 3

SUMMARY OF MEANS USED IN ANALYSIS OF VARIANCE WITH UNEQUAL N FOR THE F SCALE

Source	Group	$\bar{X}$ [a]	SD [b]	Number of Ss [c]
E (Ethnicity)	hi E	86.35	17.18	33
	lo E	105.53	17.71	27
ed (Education)	hi ed	97.25	17.70	30
	lo ed	92.70	21.63	30
G (Gender)	M (Male)	95.45	16.84	38
	F (Female)	94.14	24.49	22
E x ed	hi E hi ed	88.97	13.30	17
	hi E lo ed	83.56	20.68	16
	lo E hi ed	108.11	17.55	13
	lo E lo ed	103.14	18.18	14
E x G	hi E M	87.88	13.16	21
	hi E F	83.67	23.15	12
	lo E M	104.80	16.74	17
	lo E F	106.79	20.50	10
ed x G	hi ed M	96.74	11.04	19
	hi ed F	98.17	26.50	11
	lo ed M	94.15	21.41	19
	lo ed F	90.18	22.85	11
E x ed x G	hi E hi ed M	93.05	7.85	11
	hi E hi ed F	81.50	20.25	6
	hi E lo ed M	82.20	15.74	10
	hi E lo ed F	85.83	28.77	6
	lo E hi ed M	101.83	13.19	8
	lo E hi ed F	118.17	20.34	5
	lo E lo ed M	107.44	19.36	9
	lo E lo ed F	95.40	14.42	5

[a] The higher the score, the more authoritarian.
[b] Standard deviation.
[c] Total N = 60.

TABLE 4

SUMMARY OF MEANS USED IN ANALYSIS OF VARIANCE WITH UNEQUAL N FOR THE ADMINISTRATION RATING SCALE

Source	Group	$\bar{X}$ [a]	SD [b]	Number of Ss [c]
E (Ethnicity)	hi E	47.67	13.46	33
	lo E	50.07	11.42	27
ed (Education)	hi ed	52.80	13.18	30
	lo ed	44.70	10.58	30
G (Gender)	M (Male)	49.66	11.79	38
	F (Female)	47.18	13.88	22
E x ed	hi E hi ed	51.47	14.72	17
	hi E lo ed	43.63	11.01	16
	lo E hi ed	54.54	11.18	13
	lo E lo ed	45.93	9.97	14
E x G	hi E M	48.00	2.46	21
	hi E F	47.08	16.87	12
	lo E M	51.71	12.14	17
	lo E F	47.30	10.07	10
ed x G	hi ed M	52.53	12.58	19
	hi ed F	53.27	14.66	11
	lo ed M	46.79	10.49	19
	lo ed F	41.09	10.21	11
E x ed x G	hi E hi ed M	51.45	12.44	11
	hi E hi ed F	51.50	19.60	6
	hi E lo ed M	44.20	9.62	10
	hi E lo ed F	42.67	13.97	6
	lo E hi ed M	54.00	13.48	8
	lo E hi ed F	55.40	7.44	5
	lo E lo ed M	49.67	11.20	9
	lo E lo ed F	39.20	2.95	5

[a] The higher the score, the more favorable the evaluation of the Administration.
[b] Standard deviation.
[c] Total N = 60.

TABLE 5

SUMMARY OF MEANS USED IN ANALYSIS OF VARIANCE WITH UNEQUAL N FOR THE BLACK STUDENTS RATING SCALE

Source	Group	$\bar{X}$ [a]	SD [b]	Number of Ss [c]
E (Ethnicity)	hi E	57.00	10.82	33
	lo E	58.96	9.01	27
ed (Education)	hi ed	55.27	11.52	30
	lo ed	60.47	7.56	30
G (Gender)	M (Male)	58.55	9.48	38
	F (Female)	56.68	11.00	22
E x ed	hi E hi ed	54.41	12.77	17
	hi E lo ed	59.69	7.77	16
	lo E hi ed	56.38	10.05	13
	lo E lo ed	61.36	7.51	14
E x G	hi E M	56.33	10.59	21
	hi E F	58.08	11.60	12
	lo E M	61.29	7.30	17
	lo E F	55.00	10.58	10
ed x G	hi ed M	55.73	10.41	19
	hi ed F	54.45	13.74	11
	lo ed M	61.36	7.73	19
	lo ed F	58.91	7.35	11
E x ed x G	hi E hi ed M	52.27	10.92	11
	hi E hi ed F	58.33	15.97	6
	hi E lo ed M	60.80	8.63	10
	hi E lo ed F	57.83	6.37	6
	lo E hi ed M	60.50	7.96	8
	lo E hi ed F	49.80	10.18	5
	lo E lo ed M	62.00	7.07	9
	lo E lo ed F	60.20	8.98	5

[a] The highef the score, the more favorable the evaluation of the Black Students.
[b] Standard deviation.
[c] Total N = 60.

TABLE 6

PEARSON PRODUCT – MOMENT CORRELATION COEFFICIENTS BETWEEN ATTITUDE SCALES [a]

	F Scale	Administration	Black Students	Confederate Evaluation
F Scale		+ 0.59 **	- 0.11	+ 0.10
Administration			- 0.02	---- [b]
Black Students				- 0.08
Confederate Evaluation				

[a] df 58 for all correlations.
[b] Not computed
** $p < .01$.

TABLE 7

ANALYSIS OF VARIANCE WITH UNEQUAL N FOR F SCALE

Source	df	MS	F
E (Ethnicity)	1	5,466.05	18.44 **
ed (Education)	1	313.33	1.06
G (Gender)	1	22.78	0.08
E x ed	1	94.76	0.36
E x G	1	5.75	0.02
ed x G	1	101.27	0.34
E x ed x G	1	1,725.30	5.83 *
Error within	52	295.85	

* $p < .05$.
** $p < .01$.

TABLE 8

ANALYSIS OF VARIANCE WITH UNEQUAL N FOR CONFEDERATE EVALUATION SCALE

Source	df	MS	F
E (Ethnicity)	1	1,344.96	2.803
ed (Education)	1	777.19	1.619
G (Gender)	1	4,438.01	9.250**
E x ed	1	547.24	1.141
E x G	1	- 27.99	
ed x G	1	762.99	1.590
E x ed x G	1	213.11	0.444
Error between	52	479.76	
T (Test)	1	115.10	0.711
T x E	1	51.55	0.318
T x ed	1	586.95	3.623 /
T x G	1	57.09	0.352
T x E x ed	1	72.57	0.448
T x E x G	1	553.66	3.418 /
T x ed x G	1	82.58	0.510
T x E x ed x G	1	117.67	0.726
Error within	52	161.99	

/ $p < .10$.
** $p < .01$.

TABLE 9

ANALYSIS OF VARIANCE WITH UNEQUAL N FOR ADMINISTRATION RATING SCALE

Source	df	MS	F
E (Ethnicity)	1	86.07	0.573
ed (Education)	1	984.15	6.553 *
G (Gender)	1	85.43	0.569
E x ed	1	22.88	0.152
E x G	1	43.20	0.288
ed x G	1	144.68	0.963
E x ed x G	1	93.67	0.624
Error within	52	150.17	

* $p < .05$.

TABLE 10

ANALYSIS OF VARIANCE WITH UNEQUAL N FOR BLACK STUDENTS RATING SCALE

Source	df	MS	F
E (Ethnicity)	1	59.00	0.623
ed (Education)	1	405.59	4.287 *
G (Gender)	1	48.77	0.515
E x ed	1	- 9.51	
E x G	1	224.04	2.368
ed x G	1	4.83	0.051
E x ed x G	1	251.16	2.755
Error within	52	94.60	

* $p < .05$.

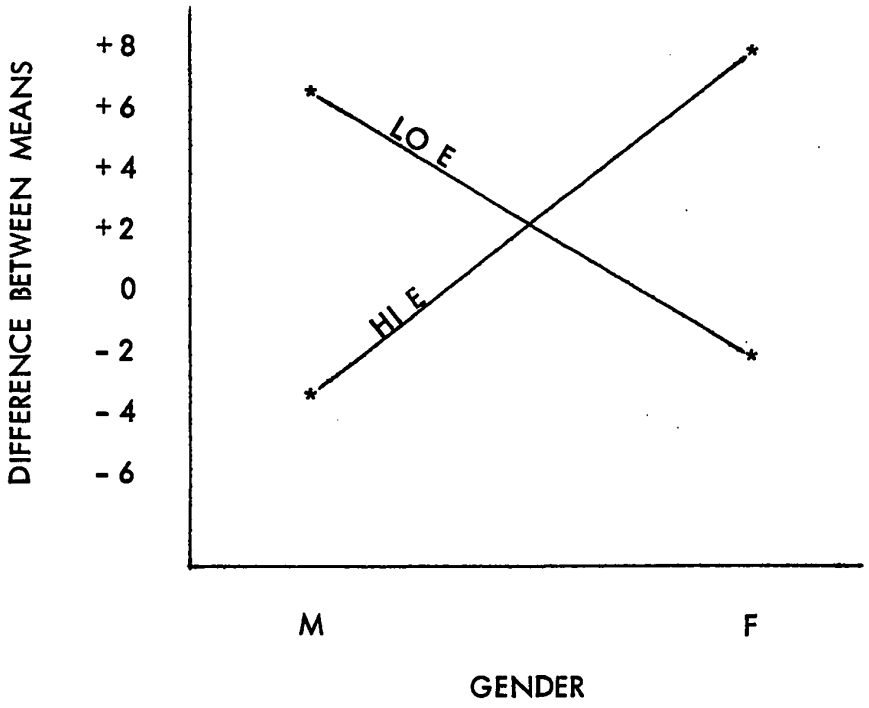


Figure 1. Difference between means of Negro and white confederate evaluations for two levels of Gender on the Confederate Evaluation scale. The higher the score, the more favorable the evaluation of the Negro confederate. HI E and LO E correspond to high and low ethnicity respectively. M and F correspond to male and female respectively. Original data given in Table 1.

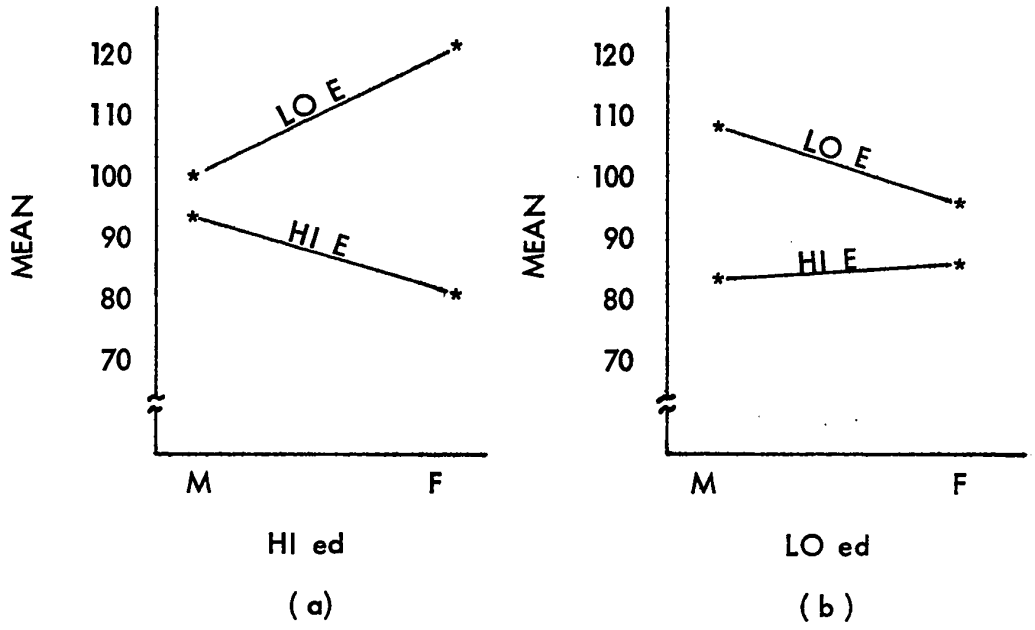


Figure 2. (a) Means for two levels of E at each level of G for HI ed on the F Scale. The higher the score, the greater the degree of authoritarianism. HI E and LO E correspond to high and low ethnic respectively. HI ed represents high education. M and F correspond to male and female respectively. G represents gender. Original data given in Table 1.

Figure 2. (b) Means for two levels of E at each level of G for LO ed on the F Scale. The higher the score, the greater the degree of authoritarianism. HI E and LO E correspond to high and low ethnic respectively. LO ed represents low education. M and F correspond to male and female respectively. G represents gender. Original data given in Table 1.

TABLE 11

COMPARISONS OF STATUS CONGRUOUS AND INCONGRUOUS GROUPS ON THE F SCALE

Status Variables			Statistic				
Ethnicity	Gender	Education	$\bar{X}$	t [a]	df	F [b]	df
hi E	M	hi ed	93.05	---	19	4.02 *	9 and 10
		lo ed	82,20				
	F	hi ed	81.50	- 0.30	10	2.02	5 and 5
		lo ed	85.83				
lo E	M	hi ed	101.83	- 0.68	15	2.15	8 and 7
		lo ed	107.44				
	F	hi ed	118.17	+2.015 ≠	8	1.11	4 and 4
		lo ed	95.40				

[a] 2 tailed t test.
[b] F test of homogeneity of two variances.
≠ $p < .10$.
* $p < .05$.

TABLE 12

COMPARISONS OF STATUS CONGRUOUS AND INCONGRUOUS GROUPS ON THE CONFEDERATE EVALUATION SCALE

Status Variables			Statistics				
Education	Gender	Ethnicity	$\bar{X}$	t [a]	df	F [b]	df
hi ed	M	hi E	5.91	- 0.07	17	1.16	7 and 10
		lo E	6.29				
	F	hi E	13.50	+ 0.53	9	3.97	5 and 4
		lo E	6.23				
lo ed	M	hi E	- 9.43	- 1.58	17	2.69	9 and 8
		lo E	5.73				
	F	hi E	1.98	+ 1.31	9	1.98	4 and 5
		lo E	- 8.60				

[a] 2 tailed t test.
[b] F test of homogeneity of two variances.