RACE, ETHNIC ATTITUDE
AND
VERBAL INTERACTION BEHAVIOR

BY

LeGay Sue Burkett

A DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in the
Department of Psychology in the Graduate School
of the University of Alabama

University, Alabama

1969

ACKNOWLEDGMENTS

I would like to acknowledge my indebtedness and deep appreciation:

To Dr. Michael Dinoff, Chairman of my dissertation committee, for his helpful advice, criticism, and encouragement throughout this investigation; to Drs. Kenneth B. Melvin, Howard L. Miller, Henry C. Rickard, Wilburn H. Rivenbark, and Warner R. Wilson, members of the committee, for their assistance and willingness to share their knowledge and experience; to Dr. Paul S. Siegel who served as a constant source of support and encouragement, not only during this investigation, but throughout my graduate study; to Pamela Ellen Butler for her assistance in investigating the reliability of the observer-recorder in this experiment. An extra expression of gratitude is extended to Dr. Wilson for his help in solving the methodological problems which arose during the course of this study.

To the four men who served as interviewers in the study for the time and effort they were willing to invest both before and during the experiment.

To my family, who made the undertaking possible and worthwhile, for their understanding, support, and encouragement during the entire period of my graduate study.

TABLE OF CONTENTS

TABLES AND FIGURES

CHAPTER I

INTRODUCTION

In recent years it has become increasingly apparent that in their research psychologists have tended to neglect the stimulus properties of the experimenter. In a recent article specifically devoted to this problem, McGuigan (1963) stated:

> While we have traditionally recognized that the characteristics of an experimenter may indeed influence behavior, it is important to observe that we have not seriously attempted to study him as an independent variable. Rather, we have typically regarded the experimenter as necessary, but undesirable, for the conduct of an experiment. Accordingly, in introductory textbooks on experimental psychology we provide prescriptions for controlling this extraneous variable; but seldom do we consider the experimenter variable further, and the extent to which we actually control it in our experimentation can be seriously questioned [p. 421].

Although a small literature has accrued, the accumulating empirical evidence is convincing in suggesting the need for studying the impact of experimenters as well as subjects in psychological research (Rosenthal, 1967; Sarason, 1965). Lack of emphasis on the experimenter as a variable and on the interaction of examiner and subject often limits the interpretation and generality of experimental data. This problem is

no more clearly apparent than in the comparative studies of Negroes and whites. The literature is replete with such studies, many of them focusing upon evaluation of intelligence. A review of comparative studies by Dreger and Miller (1960) presented evidence for ". . . wide differences between Negroes and whites in many areas of psychological functioning [p. 394]." However, as these authors pointed out, one of several problems arising in reviewing comparative studies is that most of them ignore the factor of the race of the examiner. Dreger and Miller (1960; 1965) stressed a need for repeated testing of both Negro and white individuals by both Negro and white examiners in order to determine the effects attributable to the to the interaction of examiner and subject.

Desegregation research has centered not only on differences between races, but also on racial attitudes (e.g., Pettigrew, 1961) and on the effects of desegregation upon intellectual performance (e.g., Katz, 1964). In suggesting directions for future research on desegregation, Pettigrew also emphasized the need for further study on the complicating factor of the race of the interviewer.

Race as a source of interview bias has been investigated almost exclusively by means of the information interview with the major focus on the <u>content</u> of the interview (Hyman, Cobb, Feldman, Hart, & Stember, 1954; Matarazzo, 1965). However, it has been demonstrated that, almost regardless of content, many <u>noncontent</u> aspects of speech behavior are significant

dimensions in interpersonal behavior and that they are significantly related to personality characteristics as well as to the perception and evaluation of others (Davitz, 1964; Kanfer & Marston, 1962; Kramer, 1963). The purpose of the present study was: (1) to investigate the effects of racial variables upon noncontent verbal behavior, and (2) to investigate the role that the ethnic attitudes of subjects play in determining these effects. The effects of ethnic attitude, race of the interviewer, and race of the interviewee on noncontent aspects of speech behavior have not been systematically studied, particularly in a controlled interview situation.

The partially standardized interview, developed by Chapple (1953) and further modified by others (Matarazzo, 1962; Dinoff, Morris, & Hannon, 1963), appears to be an excellent vehicle for such a study. This technique of studying interview interaction behavior is based upon careful standardization of the experimenter's behavior, and objective measures of the interviewee's speech behaviors. Neither racial nor ethnic attitude parameters of this situation have been systematically investigated.

Racial Situational Effects and Behavior

While the literature is rather limited, existing research has demonstrated that the racial environment may have a significant effect upon behavior. In an early study Canady (1936) found that when students of both races were tested alternately

by Negro and white examiners, the mean IQ of both groups was approximately six points higher when the test was administered by an examiner of their own race.

Using a pictorial mother-identification test, Trent (1954) investigated the effects of Negro and white examiners upon both kindergarten children's selections of white and Negro mothers and their verbalized racial or color reactions to the test. There was a significant difference in the selections of both white and Negro children depending upon the race of the experimenter. When children of both races were tested by white Es, there were no remarks about the race or color of the mothers. However, when tested by Negro Es, 47.5% of the white children and 38% of the Negro children made spontaneous racial remarks. Further, it was found that 25% of the Negro children avoided the issue by not making a selection when they were tested by white Es, although there were no evading responses when E was a Negro. White children showed few evasions regardless of the investigator's race.

Pasamanick and Knobloch (1955), in a longitudinal study of 40 Negro children using the Gesell Developmental Examination, found on a third examination at two years of age that these children had lowered language scores. These investigators did not vary the race of the examiner. However, analysis of their data led them to conclude that the lowered score was due to verbal inhibition in the presence of a white examiner rather than poor verbal comprehension. Pettigrew (1964) suggested that

". . . this verbal inhibition may be the principal factor underlying the common observation that Negro children generally evidence verbal comprehension superior to their verbal communication /p. 116/."

The most persistent and systematic efforts to investigate behavior in biracial situations have been made by Irwin Katz and his associates. These investigators have performed a series of experiments on the intellectual efficiency of Negro male college students in situations involving white peers and/or white authority figures. Their experiments were conducted at various Northern and Southern universities. Thus, the preponderance of Negro Ss in each study were either from the North or from the South. In two early investigations (Katz & Benjamin, 1960; Katz, Goldston, & Benjamin, 1958) conducted at a Northern university, biracial teams of two white and two Negro college students were assigned various motor and cognitive tasks under varied conditions of reward and prestige. In general, Negroes were found to manifest marked social inhibition and subordination to white teammates. Negro Ss made fewer proposals than whites and tended to accept white Ss' contributions uncritically. Over all experimental treatments a number of interesting ethnic differences in communication were displayed. Negroes (a) made fewer remarks than whites, (b) spoke more to whites than whites did to Negroes, and (c) spoke more to whites, proportionately, than to one another. White Ss, however, spoke more to one another, proportionately, than to Negroes. These

behaviors occurred even under conditions of group monetary reward for good teamwork and high group prestige (Ss being told that their abilities were higher than those of Ss in other teams). Further, in the second study Negro and white partners were matched on intelligence and even were made to display equal ability on certain team tasks.

In a subsequent experiment using Negro-white student dyads engaged in cooperative problem solving, Katz and Cohen (1962) were able to modify Negro behavior toward white partners in the direction of greater assertiveness and autonomy. It was found that when Negro Ss were not forced to state opinions which varied with those of a white peer, they tended to suppress their own ideas in deference to their white partner (even when the teammate had to be in error), and to display increased social compliance on a subsequent and different task. But when they were forced on one task to express their opinions (based on an earlier, individual testing session), they achieved greater autonomy and had greater influence over the white partner in the second situation. This study also revealed an interesting finding regarding intellectual efficiency. In the control group which did not receive assertion training, the private responses of Negroes, which they wrote down before each discussion began, showed more errors than were made on the same problems at the earlier, individual testing session. However, white Ss made fewer private errors than they had made previously.

It has been shown that anticipated comparison with whites,

in and of itself, may lower performance of Negro male college students in the South (Katz, Epps, & Axelson, 1964). Hard and easy versions of a digit symbol task were administered by a Negro faculty member to different groups of students under three types of instructions; no test, scholastic aptitude test with own college norms, and scholastic aptitude test with national (i.e., predominately white) college norms. In all three conditions, scores were reliably different from one another. The highest performance occurred in the Negro norms condition, with intermediate achievement occurring in the white norms condition, and lowest achievement occurring when no comparison was expected. These differences tended to be larger on the hard task. In a white sub-sample using only the hard task and the three types of instructions, scores did not differ under national-norm and local-norm instructions, and both of these conditions led to higher scores than did the no-test condition.

However, a more recent investigation of the effects of anticipated comparison (Katz, 1968, pp. 278-279) resulted in discrepant findings from those of the preceeding study. Race of tester, race of the comparison group, and probability of success were all manipulated independently. Among findings in this experiment was a significant interaction effect of race of tester and race of norm group. When the tester was <u>white</u>, higher performance occurred in the Negro norms condition. But when the tester was Negro, the white norm elicited higher scores

than the Negro norm. The two studies took place in different sections of the South. The earlier experiment was performed in Florida, and the later one in Tennessee.

That the effects of examiner upon examinee of a different race are not at all simple is shown by the following studies by Katz and his associates, both conducted at a predominately Negro Southern college. Katz and Greenbaum (1963) directly examined the effects of threat and racial environment upon Negro efficiency by systematically varying level of threat in different racial conditions. Negro Ss worked individually on a relatively easy digit-symbol test in the presence of an adult examiner and a confederate posing as another S, both strangers and both either white or Negro. Ss had no interaction with the confederate and the task was described as unimportant, in order to minimize the amount of social threat implicit in the white situation. The Ss were exposed to stress by being told to expect either mild or strong nonavoidance electric shocks while working. No electric shocks were actually administered. The main findings were that (a) when only mild shock was threatened, Negro Ss performed better in the presence of whites than in the presence of Negroes, but (b) when they expected a strong shock, they performed better in the Negro environment and their efficiency went down in the presence of whites. The authors concluded that performance on this task was dependent upon the particular combination of stress and racial environment conditions under which

the Ss worked (i.e., on a comparatively nonthreatening task a white environment can have either beneficial or detrimental effects on Negro performance, depending upon other conditions).

The follow-up experiment (Katz, Roberts, & Robinson, 1965) varied the race of the test administrator, the difficulty of the task, and instructions (the evaluative significance of the task). Half of the Ss were tested individually by a Negro adult; the other half by a white adult. Equal numbers of Ss were exposed to an easy digit symbol task, a task of medium difficulty, and a relatively hard code. To make the task relatively nonthreatening, Ss were told that it was a research instrument for studying a nonintellectual characteristic (i.e., eye-hand coordination). Under these low threat conditions, consistent with the earlier study, Ss worked more efficiently when tested by a white adult than by a Negro adult, but only on the most difficult of the three tasks. The authors stated that the failure to find statistically reliable differences in efficiency associated with the race of the Es on the two easier codes, as in the earlier study, may have been due to a relatively weak manipulation of the racial environment. Subsequently, two additional groups of Ss were tested by the same Negro and white examiners on the most difficult task only. To these Ss the task was presented as a test of intelligence rather than as a motor task. Under these conditions Ss did not attain higher scores in the presence of a white E. The effect of the IQ instructions was to elevate

performance slightly, although not significantly, with a Negro E and to lower scores markedly and significantly in the white E group, so that the means of both groups were at about the same level. Thus, relating the most difficult task to intellectual ability in this study had effects which were similar to those of strong shock threat in the previous study by Katz and Greenbaum (1963).

While the studies cited above offer some insight into the complexity of human behavior in various interracial situations, they have focused primarily upon task or test performance of one form or another. These investigations provide only limited knowledge concerning the effects of race upon verbal interaction, that aspect of interpersonal behavior most basic to human relations. The results of several of the studies suggest rather strongly that Negroes are verbally inhibited in biracial situations (Katz & Benjamin, 1960; Katz et al., 1958; Pasamanick & Knoblock, 1955). However, situational variables other than race may have inhibited verbal behavior in these investigations.

Racial Situational Effects and Verbal Interaction

Thus far, investigations emanating from public opinion surveys and information interview research have provided most of the information concerning the effects of the racial environment upon verbal vehavior. Before reviewing this literature, certain methodological problems inherent in such investigations should be noted.

As one might expect, interview research has been until the recent past almost exclusively content oriented, focusing on what people say. Yet, it would appear that one of the major difficulties of the information interview as a research tool is that it must rely upon the assumption that the respondent answers questions as honestly as he can. Interview questions usually range from the factual to questions concerning complex attitudes. They may relate to the past, present, or future. Generally, it is difficult, if not impossible, to obtain criterion data against which to evaluate the validity of the responses to the questions. Thus, the researcher, in evaluating his findings, must fall back upon further assumptions--that the many kinds of interview and/or interviewer bias were minimized and that his samples were truly equivalent. A related problem is that the researcher then often relies upon these verbal reports to make the interpretations and predictions about behavior. It is not the intention in raising these issues to imply that data based on content cannot be meaningful or useful. It is argued, however, that the use of more objective indices of interview behavior (e.g., content-free variables) could provide additional and more valid information for the understanding of racial effects upon verbal interaction behavior.

A number of interview studies have shown that the nature of the interviewer can influence responses, particularly when the interviewer belongs to or even is thought to belong to a

minority group or when the respondents belong to such a group. The reader who is interested in these as well as in many other sources of interview bias is referred to the comprehensive series of studies conducted by the National Opinion Research Center (Hyman et al., 1954) and to the review by Matarazzo (1965).

Public opinion surveys using both Negro and white interviewers (Es) have obtained highly divergent results with equivalent samples of Negro adults. The classic example occurred in a Memphis poll conducted by NORC during 1942 (Hyman et al., 1954). Survey questions dealt not only with opinions and attitudes, but also included a number of factual questions. On most of the questions, substantially different results were obtained depending upon the race of E. White Es generally obtained a significantly higher proportion of "proper" or "acceptable" answers to attitude and opinion questions (e.g., to white Es, 45% of the Negro Ss stated that Negroes would be treated "worse" if Japan conquered the U. S. A., while only 25% gave this answer to Negro Es. Yet even on some of the factual questions such as car ownership, apparently some Negroes reported differently to white Es. A replication study in New York City found that differential responses to white and Negro Es were greater in the Southern city, suggesting that Southern Negroes were more reluctant to talk freely to white interviewers.

More recent surveys in the South (Price & Searles, 1961)

and in the North (Pettigrew, 1964) have resulted in similar findings. Negro Ss evidenced less militancy to white than to Negro Es, and they also admitted to fewer feelings of racial victimization. Again, the differences in responses were not limited to questions concerning the race issue. Both of these studies included interview questions related to general knowledge and intelligence. Both found Negro adults to give more correct answers when interviewed by a member of their own race. Williams (1964) has offered tentative evidence that race of the interviewer is consistently associated with interview bias only when social distance (in terms of socio-economic ranking) is high and when a question is highly threatening.

However, Lenski and Leggett (1960) found both Negro and white low status respondents to show deference to higher status interviewers by agreeing to mutually contradictory propositions used at widely separated points in the interview. One-fifth of the Negro respondents agreed with both propositions, while only one-twentieth of the whites did so. Further, Negroes agreed more often with both statements than did whites at every level of education. However, white Ss showed the same basic pattern as Negroes. The lower the status, as measured by occupation of head of household, the greater the frequency of acquiescence of the respondents, even with education controlled.

While differential effects arising from group membership differences between interviewers and respondents may be due to

processes operating within the interviewers, Hyman, et al. (1954) have stated the belief that such effects arise primarily from processes within the respondent. Further, these authors have pointed out that in order for such biasing effects to occur and to be evidenced in the data, the characteristics of the interviewer must bring about some affective reaction in the respondent. Other investigators have hypothesized that communication between two people will be more successful whenever they are positively attracted to each other than when either or both have negative attitudes toward the other (Emery, Oeser, & Tully, 1957). Certainly, it seems likely that the differential effects found in the interview studies cited above are due, at least in part, to negative attitudes held by Negroes toward whites. In addition, racial effects in other experimental situations as well could be related to the ethnic attitudes of the subjects. Thus far investigators generally have not dealt specifically with characteristics of subjects other than race which might underlie these behavioral effects. As will be seen, however, empirically demonstrating a relationship between attitudes and behavior is not at all a simple task.

Ethnic Attitudes

Since 1918, the study of attitudes has occupied a central position in social psychology (Allport, 1954). However, there has been wide variation in the professional definition and use of the term attitude, both theoretically and operationally.

Shaw and Wright (1967), in discussing this problem, attribute the variations in definition to three sources: (1) the degree to which attitudes are considered a generalized and pervasive disposition of a person, or are considered to have a specific referent; (2) the degree to which the construct is generalized to include any predisposition to respond, or is considered to involve only predispositions to respond to social aspects of the environment; and (3) the theoretical conception of the composition of an attitude.

There does seem to be, however, some commonality among definitions, as well as increasing agreement among theorists. Most of the existing definitions agree upon the common characteristic that an attitude involves an existing predisposition to respond to social objects, which in interaction with situational and other dispositional variables, guides and directs the overt behavior of the individual (Shaw & Wright, 1967). The majority of investigators consider attitudes to have a specific referent, or a specific class of referents (Shaw & Wright, 1967). In addition, there is now considerable agreement concerning the major psychological processes essential for the adequate conceptualization and the best description of attitudes (Harding, Kutner, Proshansky, & Chein, 1954). Although terminology may differ slightly, many investigators, including Harding et al. (1954), contend that attitudes can best be described in terms of their cognitive, affective, and behavioral components (Katz &

Stotland, 1959; Krech, Crutchfield & Ballachey, 1962; Sargent & Williamson, 1966).

An ethnic attitude refers to an attitude held by a person toward one, some, or all members of an ethnic group other than his own, with the provision that the attitude is influenced in some way by knowledge (or presumed knowledge) of the other person's group membership (Harding et al., 1954).

Comparative studies of Negro and white ethnic attitudes. Extensive study has been made of attitudes toward the Negro. On the other hand, comparatively little attention has been given to the attitudes of the Negro himself. From the research that has been done, findings have been somewhat contradictory concerning the similarity between Negro and white ethnic attitudes. Early studies of attitudes toward other ethnic groups suggested that patterns of preference of Negro and white college students were similar. For example, studies of the ratings which Howard University students gave on the Bogardus scale seemed to indicate that Negro college students rated various groups as did white students, with the exception that they rated Negroes higher (Hartley, 1946). Studies of the stereotypes held by Negro college students also supported this conclusion, even finding that Negroes possessed stereotypes concerning their own race that were similar to those held by whites (Bayton, 1941; Meenes, 1943). However, a later study revealed that the Negro's stereotype of the white American was more negative than in previous

studies (Bayton & Byoune, 1947).

More recently, Prothro and Jensen (1952) administered the Grice-Remmers Generalized Attitude Scale to Southern Negro and white college students. The results indicated that the preferences of the two groups are not similar. The attitude of the Negro students toward whites was no more favorable than the white toward Negro. Further findings of differences between the two races have been reported by Gray and Thompson (1953). On a modified Bogardus scale, Negro college students rated all groups except their own lower than did white students. In this study a low score represented greater social distance or prejudice than a high score. The reliability of the data was verified by giving the same social distance scale to high school students and randomly selected adults not connected with school. In both instances the whites were more liberal than the Negroes. Another finding was that acquaintance with at least five individuals of a group raised the social distance ratings of both whites and Negroes for that group. A more recent study using the Bogardus scale also found that Negro college students showed greater overall social distance than white students (Fagan & O'Neill, 1965).

Ethnic attitudes and behavior. In spite of the facts that attitudes are considered to be predispositions to behavior and that one of the main tasks, as well as tests, of science is prediction, the considerable attention given to the relationship

between ethnic attitudes and overt behavior by social scientists has generated relatively little research. In the tradition begun by Bogardus (1925; 1928), most research on ethnic relations and prejudice has dealt with attitudes rather than overt behavior or the relationship between the two, and seldom has the intergroup behavior of single individuals been investigated (Harding et al., 1954). A large portion of the existing research in this area has demonstrated inconsistencies between intergroup behavior and ethnic attitudes, or between behavior in one situation and another. Several studies concerned with the attitudes and overt behavior of whites toward the Negro have demonstrated such inconsistencies (Kutner, Wilkins, & Yarrow, 1952; Minard, 1952; Saenger & Gilbert, 1950). These investigations generally have been field experiments dealing with behavior in economically controlled situations, e.g., in restaurants or department stores. They indicate that in such situations it is difficult to demonstrate the relationship between prejudice and behavior. However, the few studies which have taken place in a controlled laboratory setting also have resulted in inconsistency between ethnic attitudes and behavior, and in an inability to predict social behavior toward minority group members from verbal measures of attitude (Berg, 1966; Bray, 1950; Katz & Benjamin, 1960).

In their review of prejudice and ethnic relations, Harding et al., (1954) report that several studies have suggested at

least a moderate degree of relationship between ethnic attitudes and behavior. These studies have shown a fairly consistent correlation between the favorableness of a person's attitude toward a given ethnic group and the number of close personal contacts he is apt to have with member of that group. Also, the relationship between attitudes and perceptual response has been demonstrated by Secord, Bevan, and Katz (1956). In judging the Negroidness of a series of faces varying from mulatto to definite Negro characteristics, more prejudiced Ss perceived even the more typically Caucasian photographs as having relatively strong Negro traits.

It should be noted that at least one investigator (Campbell, 1963) has contended that, in general, the inconsistencies present in the literature have been exaggerated and are in reality not inconsistencies at all. Campbell (1963) has argued that ". . . in the literature there has been a stubborn confusion of the fact that verbal behaviors and overt behaviors have different situational thresholds with the fact of consistency [p. 162]." LaPiere's (1934) early study has been cited frequently as an example of inconsistency between verbal attitude and overt behavior. He and a Chinese couple were refused accommodation at only one of 250 eating and sleeping establishments. Yet on a subsequently mailed questionnaire, 92.5% of those responding refused to accommodate Chinese. Campbell (1963) has stated that the two situations in this study (the

questionnaire and the face-to-face situation) have very different thresholds, so there is no evidence of inconsistency. Inconsistency would be present if those who refused face-to-face accepted by questionnaire, or vice versa. Thus, Campbell has contended that verbal behaviors and overt behaviors have different situational thresholds. He has proposed a hierarchy of threshold for response modes in a given situation, ranging from autonomic responses (lowest threshold) to overt behaviors (highest). It would seem that investigations which have been able to show a relationship between verbal measures of prejudice and autonomic response provide some support for his position.

Numerous authors have contended that strong attitudes are accompanied by great emotional support (e.g., Kretch et al., 1962). Several studies which define emotionality by a physiological reaction, e.g., the galvanic skin response (GSR), have provided evidence for a positive relationship between racial attitudes and emotional response. Most of these investigations have focused on GSRs resulting from indirect exposure to the object of prejudice. For example, in a series of studies by Cooper and his associates (Cooper & Pollock, 1959; Cooper & Siegel, 1956; Cooper & Singer, 1956), GSRs were recorded for Ss when complimentary or derogatory statements were read about certain ethnic and national groups. GSRs to complimentary statements about a group against whom Ss were strongly prejudiced were greater than to similar statements about more neutral groups.

GSRs to derogatory statements about affinity groups were also greater than to neutral groups. However, greater GSRs were found for objects of strong negative attitudes than for objects of strong positive attitudes. In the third study, Cooper and Pollock (1959) reversed the procedure of the first two studies. They recorded GSRs first, and from these, successfully predicted attitude as measured by paper and pencil means. Westie and DeFleur (1959) found that prejudiced Ss gave larger GSRs than nonprejudiced Ss when viewing pictures of whites and Negroes in social situations. Similar results have been reported by Vidulich and Krevanick (1966).

Rankin and Campbell (1955) used a face-to-face situation between a prejudiced subject and the object of his prejudice in their investigation of emotional involvement in prejudice. Ss were led to believe that they were taking part in an experiment testing their reactions to a word-association test. These investigators found a significantly greater level of GSR to incidental hand contacts by the Negro than by the white experimenter on the part of their white male Ss. Porier and Lott (1967) replicated the Rankin and Campbell study employing a large sample of Negro and white stimulus persons and using the California E Scale and Rokeach's Opinionation Scale as verbal measures of prejudice. The former scale measures attitudes toward Negroes and other minority groups while the latter scale is a measure of general intolerance based primarily on belief

systems. E Scale scores, but not Opinionation scores, were found to correlate significantly with GSR bias scores. The discrepant results from those of Rankin and Campbell, in that no differential GSR was found between white and Negro Es when all Ss were combined, were explained in terms of the need for using groups of stimulus persons (Es) when person stimuli are used as independent variables.

At least since LaPiere's (1934) classic study, social scientists and investigators have given considerable attention to the relationship between attitudes and behavior; however, their concern over the inconsistencies has resulted more in theoretical and methodological considerations than in productive research (Chein, Deutsch, Hyman, & Jahoda, 1949; Cook & Selltiz, 1964; Harding et al., 1954). Investigators have suggested a number of deficiencies in the existing research. Despite the demonstration in a variety of settings of the importance of the situation for racial interaction, there has been a relative neglect of situational variables in interracial behavior research (Pettigrew, 1961). Few attitude studies have used controlled experimental situations with the social stimuli being actual examples of the referent group toward which attitudes are being studied (Campbell, 1963). There are many deficiencies in present methods of attitude measurement and attitude scale construction (Cook & Selltiz, 1964; Shaw & Wright, 1967); however, in the present context, one of the most significant shortcomings is that few scales have been validated by the predictive method

(Bray, 1950; Kretch et al., 1962; Shaw & Wright, 1967). More studies involving the effects of the race of the interviewer or examiner are needed (Dreger & Miller, 1960; 1965; Pettigrew, 1961).

The Standardized Interview as a Dependent Variable

The present research is concerned with changes in interpersonal behavior associated with race and ethnic attitudes. A number of criteria for the selection of an appropriate experimental situation are suggested by an evaluation of prior research in these areas. (a) The behavioral situation should be well controlled and designed specifically to elicit the kinds of behavior under study, with a minimum of cues for other possibly interfering behaviors and motivations. (b) A situation should be employed which permits face-to-face confrontation between a subject and the object of his attitudes. (c) All Ss should be subjected to the same situation except for the experimental variation of the racial stimuli. (d) The behavioral situation should be valid and reliable, yet subject to meaningful change.

To assess changes in social behavior it seems appropriate to focus upon verbal interaction in an interpersonal setting. Yet one of the major difficulties inherent in evaluating changes in verbal behavior is that of obtaining objectives and reliable criterion measures. To a great extent this difficulty is overcome by dealing with temporal aspects of speech as Matarazzo (1962) proposed. Further, his technique, the standardized interview, seems to satisfy the situational criteria for the present

study quite well. As will be seen from research on this instrument, it is not surprising that its use as a dependent variable has been advocated by others (Dinoff, Morris, & Hannon, 1963; Dinoff, Patterson, Hannon, & Morris, 1967).

The standardized interview has emanated primarily from Chappel's development of the Interaction Chronograph, a device which permits the accurate measurement of temporal aspects of speech in an interview setting (Chapple, 1949; 1953). Complete reviews of the development of this technique are available elsewhere (Matarazzo, Saslow, & Matarazzo, 1956; Saslow & Matarazzo, 1959). Briefly, Chappel's emphasis on the measurement of noncontent interaction variables was based upon the assumption that these are indicative of an individual's stable personality characteristics and, thus, are highly useful in assessing personality and in predicting behavior. Early findings of unreliability in interview research led Chapple to standardize the pattern of the interview and certain temporal aspects of the interviewer's (E's) behavior. This standardization resulted in the interviewee's (S's) noncontent speech behavior becoming highly reliable when interviewed by different Es obeying the identical interview rules.

Matarazzo and his associates have carried out a series of studies which substantiate the reliability of Chapple's technique (summarized in Saslow & Matarazzo, 1959). These investigators have demonstrated significant reliabilities for

the interviewer, the interviewee, the observer, and the scorer. Two studies have shown that while there are marked individual differences in interaction behavior among Ss, the interaction behavior of any given S is highly stable across two different interviewers when Es standardize their behavior according to the predefined rules (Matarazzo, Saslow, & Guze, 1956; Saslow, Matarazzo, & Guze, 1955). Both of these studies used two interviewers (a young internist and an older psychiatrist), each interviewing the same 20 Ss independently and in counterbalanced order. The test-retest interval between first and second interview consisted of only a few minutes. There was no statistical evidence of "interviewer-order" effects upon Ss behavior. Equally striking stability has been demonstrated when only a single interviewer was used and the test-retest interval was extended over a week, five weeks, and eight months (Saslow & Matarazzo, 1959; Saslow, Matarazzo, Phillips, & Matarazzo, 1957). In a more recent study, Dinoff, Morris, and Hannon (1963) used a modified version of the standardized interview and provided additional evidence for the reliability of this technique. These studies have also demonstrated that planned changes in the intra-interview behavior of E results in reproducible modification of S's interaction patterns (Matarazzo, Saslow, Matarazzo, & Phillips, 1958).

A number of studies have investigated the validity of the standardized interview as a behavioral measure of personality. One study, using both inpatient and outpatient Ss, found a

number of psychological test and organismic correlates of interview behavior (Matarazzo, Matarazzo, Saslow, & Phillips, 1958). Although socio-economic level did not correlate significantly with any of the interaction variables (possibly because of inadequate sampling), it was found that age, sex, intelligence, and the personality variables of stereotypy, rigidity, guardedness and anxiety were related to verbal behavior. Various suggestive relationships between S's self-description (as revealed in the content of the interview) and his overt interview interaction behavior have been found (Phillips, Matarazzo, Matarazzo, Saslow, & Kanfer, 1961). Comparisons have been made of the interaction behavior of various nosological groups, including hospitalized schizophrenics, outpatient neurotics, and normal Ss (Matarazzo & Saslow, 1961). A number of significant differences were found between the noncontent speech behaviors of the various patient and normal groups. Dinoff, Patterson, Hannon, and Morris (1967) similarly found differences in standardized interview behavior among regressed schizophrenics, nonmedicated schizophrenics, and normals.

Within limits, content appears to have minimal effect upon the noncontent variables in the standardized interview. Matarazzo, Weitman, and Saslow (1963) purposely introduced three different content areas (family, education, and job history) in counterbalanced order for three subperiods of a forty-five minute interview. The average duration of utterance (Action) of

the Ss was not influenced by these changes in topics.

Kanfer, Phillips, Matarazzo, and Saslow (1960) investigated a different aspect of content. E was instructed beforehand to make "interpretations" in the second period of a standardized interview about S's personality, motivations, etc., based on what S had revealed about himself in the first period. Interpretations were found to be associated with a decrease in S's duration of Action. These results suggest that the standardized interview is sensitive enough to detect changes in emotionality. Certainly interpretations may be emotionally laden and potentially threatening. In general, however, content does not appear to influence Ss behavior in the standardized interview because of the non-directive behavior of E. Content of the interview is determined essentially by S himself, except for the introduction of general topic areas by E.

Thus, results of a number of studies suggest that in the standardized interview setting, S's interaction behavior is (a) highly stable when E adheres to the standardized rules; (b) sensitive to changes in the intra-interview behavior of E; (c) correlated with a number of personality and organismic variables; and (d) not significantly influenced, within limits, by the content of the interview.

In addition, although the standardized interview measurements are highly reliable or stable under constant conditions, they have been shown to be subject to change associated with

meaningful events in the life of the S. Sensitivity of this technique to detect changes in interaction variables following various amounts of psychotherapy has been shown by Saslow and Matarrazzo (1959). Morris (1963) has demonstrated changes in measurement following several types of "operant-interpersonal" treatment with regressed schizophrenics. Changes in verbal interaction variables of normals and chronic schizophrenics have been found following brief stimulus deprivation and partial social isolation experiences (Hannon, 1962). Patterson (1963) was able to demonstrate the modifiability of speech behaviors of chronic schizophrenics by means of hypnotic, posthypnotic, and waking suggestions.

The standardized interview appears to offer an excellent means of directly and objectively studying interpersonal behavior in a setting in which situational variables to a large extent are controlled. More specifically related to the focus of this study, the technique seems well suited for the study of the effects of racial situational variables upon interpersonal behavior in terms of noncontent speech patterns. Further, the sensitivity of this technique would recommend it as a potential objective measure of attitudes.

At this time little is known concerning the noncontent speech patterns of the Negro, or how they compare with those of whites. All of the studies cited above have used white Es as well as all white S samples. However, Dinoff, Burkett, Griffin

and Gilbert (1968), using a modified standardized interview, compared the verbal behavior of Negro and white elementary school children in the first, third, and sixth grades. The two racial groups tended to differ from each other on almost every measure investigated. For the most part, white children talked more than Negro children in terms of total time during each of the five periods of the interview. But, during the silence stress period, Negro children tended to talk longer than the white, which suggests higher anxiety. The meaning of these findings of differences across races, however, is unclear, because of the fact that white Es were used for both racial groups. The Negro group may have been inhibited by the race of the interviewer. Further, the finding of a one-to-one relationship between E's and S's Units for the Negro youngsters may be seen as a form of deference on the part of these children in the presence of a white interviewer.

CHAPTER II

THE PROBLEM

This investigation was an attempt to assess the effects of racial variables upon interpersonal behavior. More specifically, it was designed to determine the effects of the race of the interviewer upon the noncontent verbal behavior of both Negro and white interviewees. Previous research concerned with such effects has not focused on noncontent aspects of speech behavior. Although Dinoff et al. (1968) found considerable difference in verbal interaction variables between Negro and white children, these investigators used only white interviewers. The difficulties encountered in interpretation of these results accentuate the need for research concentrating upon interaction effects of examiner and subject when race is varied in a controlled interview situation.

A second objective of this study was to investigate the role that the ethnic attitude (or racial prejudice) of the subject plays in determining these effects. Therefore, subjects of both races were divided into high and low prejudice groups as measured by a paper and pencil attitude test. All subjects were tested in a standardized interview situation by a white or a

Negro interviewer. To control for individual differences between interviewers other than race, two interviewers of each race were used. Thus, this experiment attempted to assess the effects of prejudice, same vs. different race of the interviewer, race of subject, and interviewers 1 vs. 2 (the independent variables) upon modification of certain aspects of noncontent speech (dependent variables) of the subject population. The design of the experiment is presented in Table 1. The predictions of this study were as follows:

1. It was predicted that Negro subject groups (Groups III, IV, VII, VIII, XI, XII, XV, and XVI) would differ significantly from white subject groups (Groups I, II, V, VI, IX, X, XIII, and XIV) on the obtained verbal interaction variables. That is, there would be a significant Race of S main effect. This prediction was based upon previous findings of verbal interaction differences between the two races.

2. It was predicted that the subject groups which were interviewed by a member of their own race (Groups I, II, III, IV, IX, X, XI, and XII) would differ significantly from comparable groups interviewed by a member of a different race (Groups V, VI, VII, VIII, XIII, XIV, XV, and XVI) on the verbal interaction variables. That is, there would be a significant Same vs. Different Race of E main effect. The expectation was that race of E would have a significant effect upon the interaction behaviors of both Negro and white subject groups. Published findings have demonstrated a possible inhibitory effect upon

TABLE 1

Experimental Design

Group	Treatment Combination			
	High vs. Low Prejudice	Same vs. Different Race of *E*	White vs. Negro Race of *S*	*Es*-1 vs. *Es*-2
I (HSW1)	High	Same (white)	white	1
II (HSW2)	High	Same (white)	white	2
III (HSN1)	High	Same (Negro)	Negro	1
IV (HSN2)	High	Same (Negro)	Negro	2
V (HDW1)	High	Different (Negro)	white	1
VI (HDW2)	High	Different (Negro)	white	2
VII (HDN1)	High	Different (white)	Negro	1
VIII (HDN2)	High	Different (white)	Negro	2
IX (LSW1)	Low	Same (white)	white	1
X (LSW2)	Low	Same (white)	white	2
XI (LSN1)	Low	Same (Negro)	Negro	1
XII (LSN2)	Low	Same (Negro)	Negro	2
XIII (LDW1)	Low	Different (Negro)	white	1
XIV (LDW2)	Low	Different (Negro)	white	2
XV (LDN1)	Low	Different (white)	Negro	1
XVI (LDN2)	Low	Different (white)	Negro	2

verbal behavior of subjects interacting with members of another race.

3. It was predicted that highly prejudiced Ss interviewed by an E of different race (Groups V, VI, VII, and VIII) would differ significantly more from highly prejudiced Ss interviewed by an E of same race (Groups I, II, III, and IV) than would Ss of low prejudice under similar conditions (Groups XIII, XIV, XV, and XVI vs. Groups IX, X, XI, and XII). That is, there would be a significant Same vs. Different Race of E X Prejudice interaction effect. It has been demonstrated that prejudicial attitudes are accompanied by an emotional response of Ss in a face-to-face situation with the object of prejudice. It was believed that this emotionality would be reflected in Ss' verbal interaction behavior.

4. It was predicted that Negro Ss interviewed by an E of different race (Groups VII, VIII, XV, and XVI) would differ significantly more from Negro Ss interviewed by an E of same race (Groups III, IV, XI, and XII) than would comparable groups of white Ss under similar conditions (Groups V, VI, XIII, and XIV vs. Groups I, II, IX, and X). That is, there would be a significant Same vs. Different Race of E X Race of S interaction effect. The expectation was that a white E would have a more detrimental effect upon a Negro S's verbal behavior than a Negro E would have upon the verbal behavior of a white S. It was felt that the interview situation with a member of a different race would hold more threat potential for the Negro

than for the white Ss because of the differential in relative status perception by members of the two racial groups. Particularly in the South, Negroes are generally considered, by whites and Negroes alike, to be of lower social status than whites. At least in this sense then, there would be a difference in the perception of the situation by Ss of the two races, as well as a difference in the amount of social threat involved.

CHAPTER III

EXPERIMENTAL PROCEDURE

Attitude Scale

The Bogardus Social Distance Scale was selected for this research since it has been used widely (Berg, 1966). Further, investigations have indicated that this scale is both valid and reliable (Sargent & Williamson, 1966). A modification of the scale, similar to that used by Fagan and O'Neill (1965), was administered to white and Negro eleventh grade students. Both Negroes and whites rated 15 ethnic groups on a 13-point scale; however, only Negro ratings of white Americans and white ratings of Negro Americans were considered relevant to this research.

The administration of the attitude scale was structured in order to maximize the dissociation of scale responding, classroom relevancy, and the subsequent interview. In each of three high schools, the attitude scale was administered to the entire eleventh grade by the respective school's guidance counselors. The first page of the form for administering the scale explained the test in general, assured confidentiality of responses, and requested such information as name, school, and race. The second page of the form contained the attitude scale and specific instructions for taking the test. Students were

instructed to separate the two pages of the form upon completion of the scale and to turn them in separately to the counselors. The investigator subsequently identified students by means of identification numbers at the top of the two pages. The attitude scale is presented in Appendix A.

Only male students were to be used as Ss in the present study. Females, Negroes attending a predominately white school, and the few students who marked identification numbers from the test forms or who did not respond to the critical test item were not included in the total pool of scale scorers. Additionally, six male students (two Negro and four white) were excluded because of a lack of consistency in responses, e.g., responding both "would marry" and "would exclude from the country" to the critical test item.

For the purposes of the present investigation, attitude scale scores were obtained on 214 male white students and on 139 male Negro students. Scores ranged from 1 to 13 for both racial groups. However, the distribution of scores was not similar for the two races. For whites, the distribution was negatively skewed, with a mean of 10.52 and a mode of 13. For Negroes, the distribution was positively skewed, with a mean of 2.62 and a mode of 1. The frequency distributions of test scores for the two racial groups are presented in Table A of Appendix C.

Subjects

The cooperation of the principals and faculty of three

high schools was enlisted in the administration of the Bogardus Social Distance Scale to eleventh grade students and in the further implementation of this research. The attitude scale was administered in all three schools during the week prior to the beginning of the experiment. Attitude scale scores were obtained on 214 male white students and on 139 male Negro students. The white students attended a predominately white high school, Tuscaloosa High School, Tuscaloosa, Alabama. Negro students attended two predominately Negro high schools, Druid High School, Tuscaloosa, Alabama, and Riverside High School, Northport, Alabama. The use of two Negro schools was necessary in order to increase the size of the comparatively smaller Negro sample.

From each male racial group, 24 high scorers and 24 low scorers were selected as Ss for this study. They represented the extreme scorers for the respective racial groups on the obtained continuum of attitude scores. This selection yielded 24 Ss in each of four combinations of race and prejudice (i.e., Negro high scorers, Negro low scorers, white high scorers, and white low scorers). Then from each of these combinations, six Ss were assigned to each of the four Es, two whites and two Negroes.

Assignment of Ss to the four Es was accomplished unwittingly by the guidance counselors of the schools, who had no knowledge of which E would be interviewing on a given day. The school

administrators insisted that the school have the authority to determine when particular students were allowed to leave their school for the interview. This was deemed necessary in order to avoid conflicts with important educational functions, e.g., academic tests. Therefore, a list of potential Ss from each school was submitted to the respective school's guidance counselors, with students on each list grouped according to attitude test scores. The counselors were not told the meaning of the grouping. The investigator then requested Ss for each interview test session from one or more of the groups rather than requesting particular students.

In both high and low prejudice groups several more students than the required number were submitted as potential Ss in case they were needed as replacements. For white high scorers and Negro low scorers, additional Ss posed no problem. However, for white low scorers and Negro high scorers, this necessitated extending the range of scores for the respective groups one more scale point than was desired. This extension of the range was necessary for the white low scorers, but not for the Negro high scorers (see Table A, Appendix C). All potential Ss were required to have their parents sign forms permitting them to participate in an interview study. Two white low scorers and four white high scorers either refused to cooperate or their parents refused to allow them to participate. The Negro schools did not report any refusals to cooperate in the study. Attitude scale scores

for the Ss in the 16 experimental groups are presented in Table B of Appendix C.

The schools attempted to give the investigator their fullest cooperation. However, because of various complications, they were not always able to comply with the requests of the investigator. Occasionally, no students were available from a particular school or students from a requested group were unavailable. For this reason, several control devices originally intended to be included in the experimental procedure fell short of perfection. For example, an attempt to counterbalance race as well as prejudice of the Ss across the four Es was not completely successful.

Procedure

For only token remuneration, four male adults, two Negroes and two whites, served as interviewers (Es) for this research; Negro interviewer-1 (NE-1), a 41-year-old Tuscaloosa County farm agent with a M.S. degree from a Northern university; Negro interviewer-2 (NE-2), a 37-year-old advanced graduate student in education at the University of Alabama with a M.S. degree from another Southern college; white interviewer-1 (WE-1), a 22-year-old first-year graduate student in clinical psychology at the University of Alabama; and white interviewer-2 (WE-2), a 29-year-old first-year graduate student in educational psychology at the University of Alabama. Both white Es were originally from the North; both Negro Es were Southerners who had completed

all or part of their graduate study at Northern colleges. NE-2 and WE-2 both had a number of years teaching experience, WE-2 at the secondary level and NE-2 at both the secondary and college levels. While it was considered desirable that the Es be similar in background and age, reliability studies have used quite dissimilar Es with high reliability (Matarazzo et al., 1956; Saslow et al., 1955).

None of the Es had experience in counseling or interviewing prior to this research. Experience was not considered crucial to the experiment, since others have found that inexperienced interviewers readily learn to become spontaneous and comfortable while reliably following the rules of the standardized interview (Matarazzo, 1962). Prior to the beginning of the interviews, all Es were trained in the standardized interview technique as modified by Dinoff et al. (1963). The characteristics of the modified standardized interview and the rules governing the interviewer's behavior are presented in Appendix B. The Es practiced the interview technique until their objective interaction patterns indicated they were approaching the prescribed patterns with a high degree of accuracy. Only then were the interviews for the present study initiated.

The investigator (white female) brought Ss, usually in groups of four, from their high school to the University of Alabama Psychological Clinic where the interviews took place. On the way to the clinic the investigator explained the purpose of

the experiment to the Ss as follows:

> This is a study on interviewing. We are trying to determine the best methods of interviewing people and the best way to train people to interview. We will appreciate it if you will help us to find out more about interview procedures. In general you will be able to talk about anything that you would like to during the interview.

Upon arrival at the clinic Ss were led to the clinic waiting room where they remained until their respective interviews. The design called for each S to be interviewed individually by either a white or a Negro E. E approached S in the waiting room, introduced himself, and accompanied S to the room in which the interview took place. Prior to the introduction S was not aware of the race of E.

Upon signal from the observer-recorder (O), each interviewer began the interaction with the statement, "(S's name), I would like to talk with you today about anything at all you would like to talk about." E had no information concerning S prior to the interview.

All interviews were conducted individually in a relatively sound-dampened room approximately 10' x 18'. E and S sat across from each other separated by a table on which was placed a Shure microphone (Model 415).

O sat behind a 30" x 60" one-way mirror in an adjoining observation room and monitored the interaction between E and S via Monarch earphones (Model ES-300). A table located under the

one-way vision screen was equipped with an Esterline-Angus operations recorder and a microswitch panel. Each microswitch was connected to an individual pen of the operations recorder and to an individual impulse counter and running time meter on a Grayson-Stadler operant conditioning rack. O recorded the interaction between E and S by pressing designated microswitches, one for E and five for S (one for each subperiod). This action by O simultaneously activated the impulse counters and running time meters and deflected the pens of the operations recorder. In this manner, accurate records of speech were obtained for each interview.

Communication between O and E was provided by a Multitone School Aid Radio (Model MK-11), a small wireless radio receiver which E wore in his breast pocket with a hearing-aid-like attachment placed in his ear. O's broadcast originated from a Shure microphone (Model 560) placed in front of her. This signal was amplified by a Bogen amplifier (Model AP 30) and transmitted to an induction loop circuit partially hidden underneath a rug in the interview room. O's messages were audible only to E. This communication to E by O was used to indicate the beginning and end of time periods and to keep careful check upon E's length of speech. Thus, great accuracy of the temporal aspects of the interview were obtained.

Permanent tape recordings were also made of each interview via a Wollensak tape recorder located in the observation room. These tape recordings were obtained for subsequent analysis

(e.g., reliability of O's scoring). Scoring and recording were done by the investigator who had extensive experience in such scoring. The reliability of O's scoring was checked by having another experienced observer-recorder score the first period of six interviews from the tape recordings. The scoring of the six live interviews was then compared with the scoring of the tape recordings. The original data for S's Units and S's Time and the scores obtained by the different O from the tape recordings are presented in Table I of Appendix C. Product-moment correlation coefficients (r) of .99 were obtained both for S's Units and for S's Time, suggesting that O's scoring of the interview was highly accurate. Furthermore, the minimal difference between the two scorings displays the accuracy with which the standardized interview can be measured.

The following interaction variables were recorded on each S:

1. Total Time: The duration of the interview in minutes.
2. S's Units: The number of S's speeches.
3. E's Units: The number of E's speeches.
4. S's Time: The total time S spoke during the interview.
5. S's Action: The average duration of S's utterances.
6. S's Silence: The average duration of S's silences.

CHAPTER IV

RESULTS

Tables C through H of Appendix C present, for each of the 16 groups, individual scores, group means and standard deviations for the six interview interaction variables recorded during the standardized interview. Hartley's *F*max test for homogeneity of variance (Winer, 1962) was applied to the data of each of the six criterion measures. The *F*max statistic for one variable, *S*'s Action, exceeded the critical value for a .01-level test, indicating nonhomogeneity of variances among the 16 groups for that variable. It has been suggested that some deviation from the assumptions of normality and homogeneity of variance underlying parametric statistics does not contraindicate their use (Lindquist, 1953). Further, there is some evidence that the *F*max test is oversensitive to departures from normality, as are the other popularly used tests for homogeneity of variance (Winer, 1962, p. 96). Other investigators using noncontent verbal criterion measures with demonstrated nonhomogeneity of variances obtained identical significance levels from parametric and nonparametric statistical methods (Matarazzo & Saslow, 1961).

In view of the robust nature of parametric tests with respect to departures from homogeneity of variance and of the fact that nonhomogeneity applied to only one of the six variables, the decision was made to use parametric statistical methods in the analysis of these data. However, the results of the data for S's Action would have to be interpreted with caution if serious departure from the results of the other five variables occurred. In that case, the reliability of the data for S's Action would be questionable.

The analysis of variance of a 2 x 2 x 2 x 2 factorial design was used in analyzing group differences on the criterion measures (Winer, 1962). Six analyses were computed, one for each measure investigated in this experiment. Table 2 summarizes the results of the analyses of variance for the six variables. The results revealed a number of significant effects at or beyond the .01 level of confidence for all variables except S's Time. Triple interaction effects between Prejudice, Same vs. Different Race of E, and Race of S were significant for four of the measures: S's Units, E's Units, S's Time, and S's Action. The fifth variable, S's Silence, showed a significant two-way interaction between Same vs. Different Race of E and Race of S. These interaction effects are presented graphically in Figures 1 through 5.

Figure 1a shows the profiles of the significant ($F = 7.53$, $p < .01$) three-way interaction for S's Units. When E is of the same race, highly prejudiced white Ss speak a fewer number

TABLE 2

Summary of the Analyses of Variance
for the Dependent Variables

Source	df	Total Time		S's Units		E's Units	
		MS	F	MS	F	MS	F
Prejudice (A)	1	231		2860	9.86**	2636	13.66***
Same vs. different race of E (B)	1	379		84		23	
Race of S (C)	1	1552	2.91	60		464	2.40
Es-1 vs. Es-2 (D)	1	534	1.00	1320	4.55	4148	21.49***
A X B	1	687	1.29	2625	9.05**	1313	6.80
A X C	1	706	1.32	294	1.01	98	
A X D	1	40		888	3.06	421	2.18
B X C	1	625	1.17	2882	9.94**	128	
B X D	1	101		0		98	
C X D	1	43		113		446	2.31
A X B X C	1	1622	3.04	2185	7.53*	1760	9.12**
A X B X D	1	825	1.54	126		128	
A X C X D	1	138		294	1.01	83	
B X C X D	1	491		925	3.19	1008	5.22
A X B X C X D	1	165		15		98	
Within	80						
Total	95						

(Continued)

TABLE 2--(Continued)

Summary of the Analyses of Variance
for the Dependent Variables

Source	df	S's Time		S's Action		S's Silence	
		MS	F	MS	F	MS	F
Prejudice (A)	1	95	5.94	1646	8.99**	602	1.22
Same vs. different race of E (B)	1	5		107		5	
Race of S (C)	1	104	6.50	647	3.54	6162	12.45***
Es-1 vs. Es-2 (D)	1	162	10.13**	1530	8.36**	7514	15.18***
A X B	1	22	1.38	614	3.36	699	1.44
A X C	1	11		21		88	
A X D	1	4		1		809	1.63
B X C	1	4		1017	5.56	4753	9.60**
B X D	1	8		1		1286	2.60
C X D	1	21	1.31	142		3355	6.78
A X B X C	1	126	7.88*	1459	7.97*	1606	3.24
A X B X D	1	34	2.13	243	1.33	903	1.82
A X C X D	1	5		60		33	
B X C X D	1	3		138		502	1.01
A X B X C X D	1	1		32		1195	2.41
Within	80						
Total	95						

*$p < .01$.
**$p < .005$.
***$p < .001$.

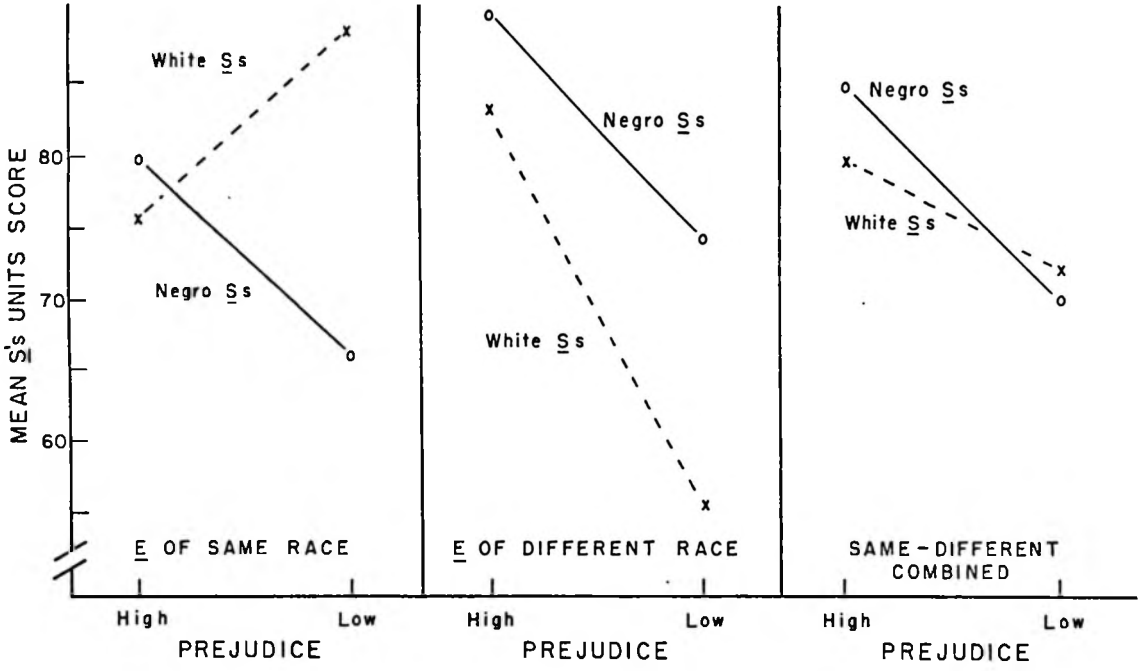

Figure 1a

Figure 1. Profiles of Prejudice X Same vs. Different Race of E X Race of S interaction for S's Units

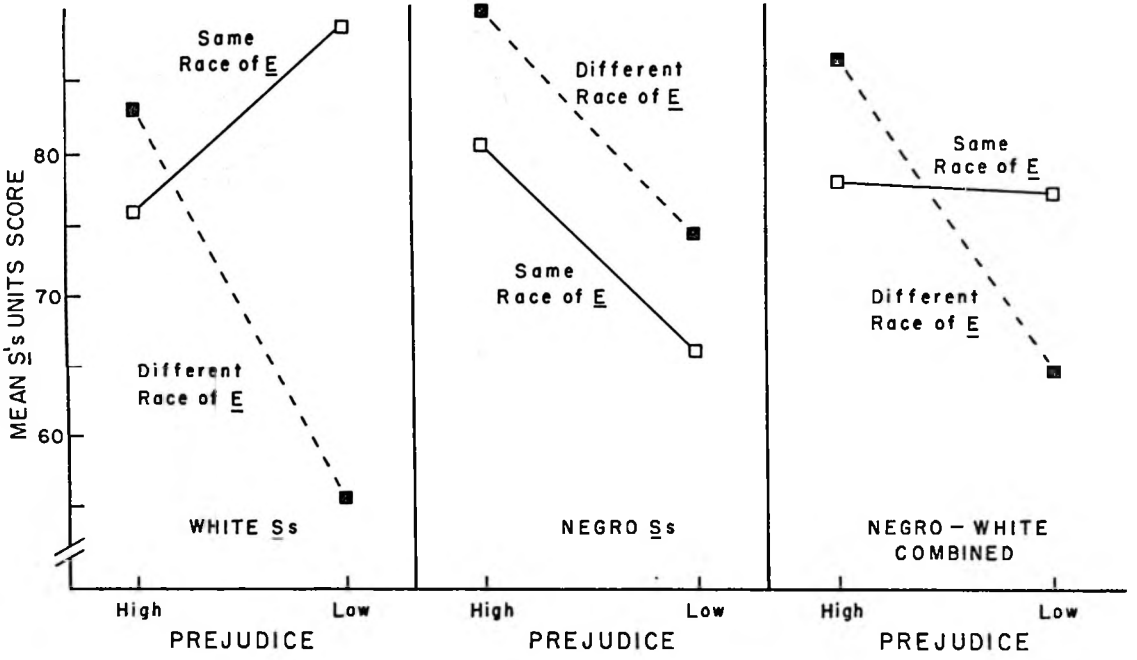

Figure 1b

Figure 1.--Continued

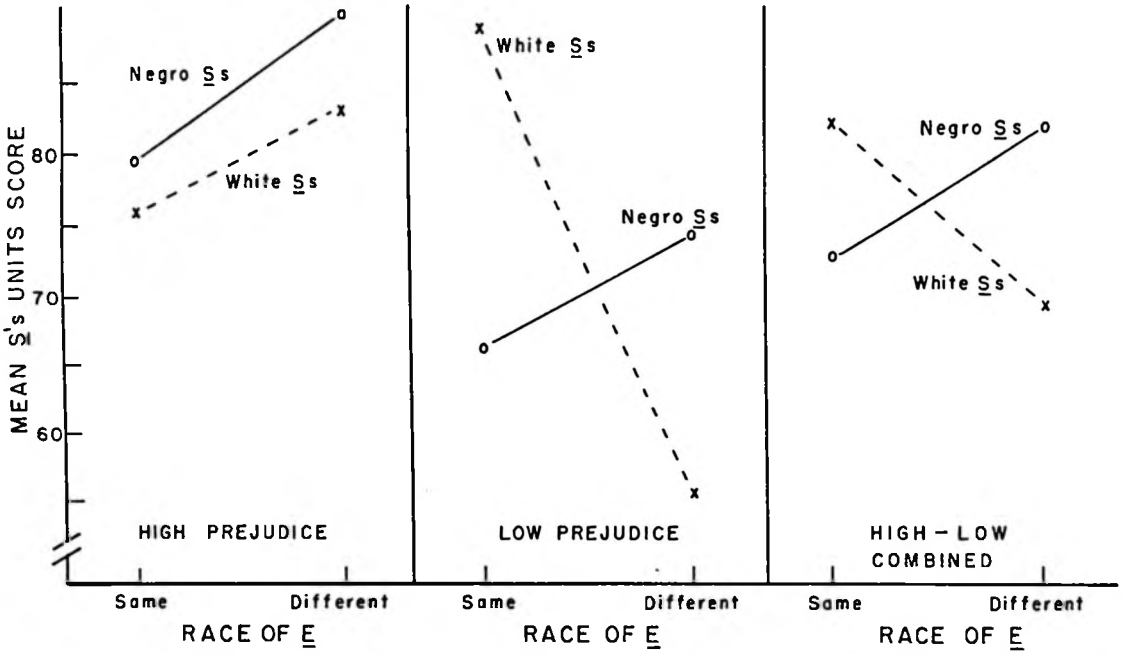

Figure 1c

Figure 1.--Continued

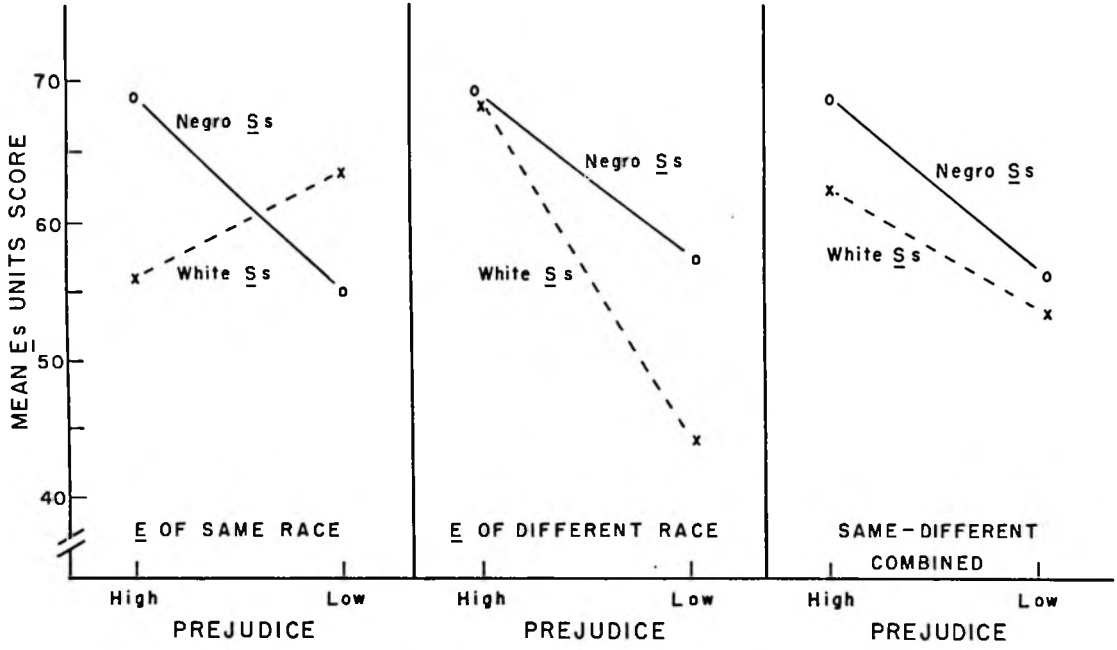

Figure 2. Profiles of Prejudice X Same vs. Different Race of E X Race of S interaction for E's Units

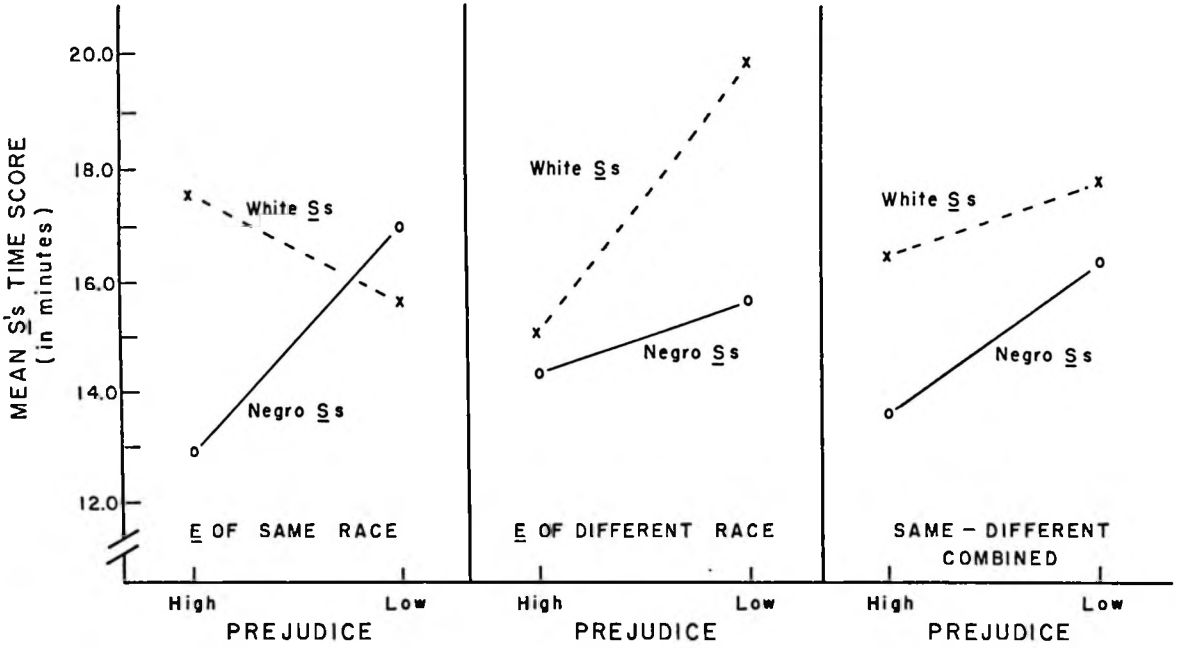

Figure 3. Profiles of Prejudice X Same vs. Different Race of E X Race of S interaction for S's Time

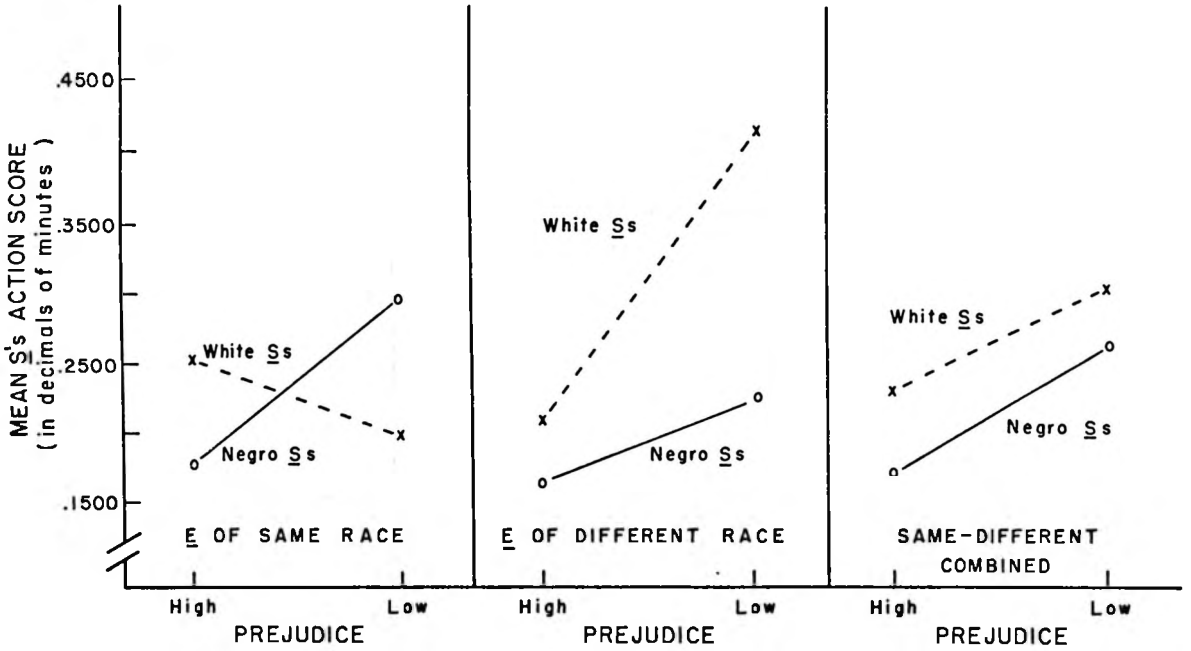

Figure 4. Profiles of Prejudice X Same vs. Different Race of E X Race of S interaction for S's Action

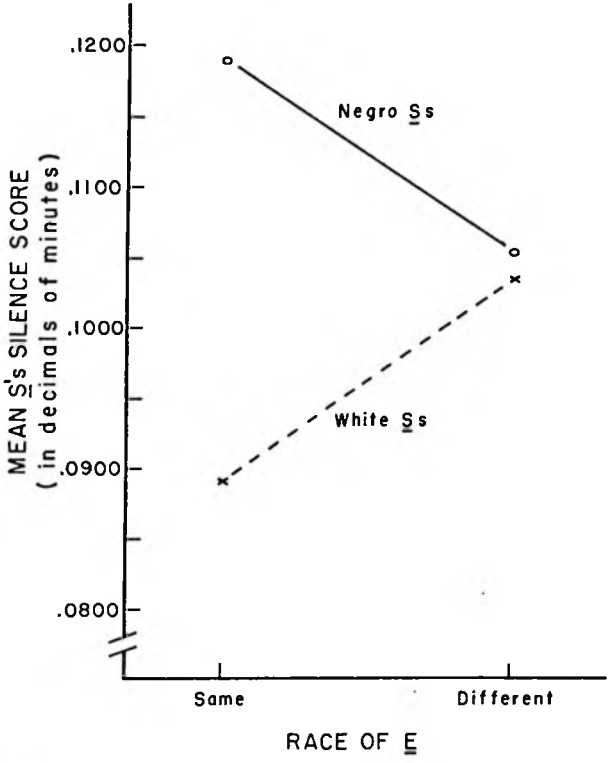

Figure 5. Profiles of Race of S X Same vs. Different Race of E interaction for S's Silence

of times than those low in prejudice. The opposite occurs when the E is of a different race. In this case the highly prejudiced white Ss speak a greater number of times than those low in prejudice. This interaction effect involves a large change on the part of only one mean. The low prejudiced white S speaks in many units to the white E, while the low prejudiced white S speaks few units to the Negro E. From Figure 1a it is clear that for S's Units the significant main effect for Prejudice ($F = 9.86$, $p < .005$) is not a consistent main effect. Highly prejudiced Ss do not always speak in a greater number of utterances than Ss low in prejudice. The significant main effect is due only to the depression of the scores in the white-low-different condition.

To aid in the interpretations of the significant ($p < .005$) two-way interactions for S's Units, Figures 1b and 1c present geometric representations of the triple interaction effect which are equivalent to that shown in Figure 1a. The profiles of the two-way interaction between Prejudice and Same vs. Different Race of E are given at the right in Figure 1b. Highly prejudiced Ss use more units of speech when E is of different race than when E is of same race. However, Ss low in prejudice use fewer units of speech when E is of different race than when E is of same race. Inspection of the profiles of the interaction within each level of race of S (shown at the left) clearly reveals that this effect is not consistent. Low prejudiced Ss do not generally use fewer units when interviewed by an E of different race than do low prejudiced Ss interviewed by an E of same race.

This effect occurs only in the white condition. The interaction effect is due only to the extreme scores of the low prejudiced white Ss in the two conditions of same and different race of E.

To the right in Figure 1c are presented the profiles of the two-way interaction effect between Race of S and Same vs. Different Race of E. When E is of same race, white Ss use more units of speech than do Negroes. Yet, when E is of different race, white Ss use fewer units of speech than do Negro Ss. From the profiles of the interaction within each level of prejudice shown at the left, it is obvious that this effect also is inconsistent. White Ss interviewed by an E of same race do not always use more units than Negroes interviewed by an E of same race. This effect occurs only in the low prejudice condition. Again, the significant overall interaction effect is due only to the extreme scores of the white low prejudiced Ss.

The graphic representation of the significant ($F = 9.12$, $p < .005$) three-way interaction for E's Units is presented in Figure 2. In the case in which E is of the same race, E speaks less frequently to white Ss of high prejudice than to white Ss low in prejudice. However, when E is of different race, E speaks more frequently to white Ss of high prejudice than to those low in prejudice. Again, this interaction effect involves a large change on the part of only one mean. The low prejudiced white S is spoken to often by the white E, while the low prejudiced white S is spoken to infrequently by the Negro E. This one effect results in a significant ($F = 13.66$, $p < .001$) main

effect for Prejudice and a trend ($p < .20$) toward a Race of S main effect. Figure 2 shows, however, that these are not consistent main effects. E does not always use more units with highly prejudiced Ss than with those low in prejudice. Nor does he always use more units with Negroes than with whites. These effects are due only to the marked depression of the scores in the white-low-different condition.

The profiles of the significant ($F = 7.88$, $p < .01$) triple interaction between Prejudice, Same vs. Different Race of E, and Race of S for S's Time is shown in Figure 3. When E is of the same race, white highly prejudiced Ss talk more during the interview than white Ss low in prejudice. The opposite occurs in the different race of E condition. In this case, white highly prejudiced Ss talk less than Ss low in prejudice. This interaction effect again involves a large change in only one mean, that of low prejudiced white Ss in the two conditions of same and different race of E. The white low prejudiced S talks little to the white E, while the low prejudiced white S talks a great deal to the Negro E. This one effect results in trends ($p < .025$) toward main effects both for Prejudice and for Race of S. Clearly, however, these effects are inconsistent. Highly prejudiced Ss do not always talk less than those low in prejudice. Negroes do not always talk less than whites. These effects result only from the elevation of scores in the white-low-different condition.

The profiles of the significant ($F = 7.97$, $p < .01$) three-way interaction for S's Action (Figure 4) indicates that in the case in which E is of the same race, highly prejudiced white Ss

speak with longer average utterances than white Ss of low prejudice. Yet, when E is of different race, highly prejudiced white Ss speak with shorter average utterances than white Ss low in prejudice. A large change in only one mean is involved in this interaction. The low prejudiced white S talks in short utterances to the white E, while the low prejudiced white S talks in long utterances to the Negro E. This one effect results in a main effect for Prejudice significant at the .005 level and a trend toward a Race of S main effect significant at the .10 level. However, inspection of Figure 4 shows that these clearly are not consistent main effects. Low prejudiced Ss do not always talk in longer average utterances than highly prejudiced Ss. White Ss do not always talk in longer utterances than Negro Ss. It is apparent that these effects are due only to the elevation of the scores in the white-low-different condition.

It should be noted that the profiles of the triple interactions for S's Time and S's Action are inversely related to those of S's Units and E's Units. This inverse relationship between the variables is to be expected from the nature of the intercorrelations among the interaction variables reported elsewhere (Matarazzo, Saslow, & Hare, 1958). It would appear that those Ss who spend more time talking during the interview often tend to speak in fewer utterances of longer duration than do Ss who talk less.

The profiles of the significant ($F = 9.60$, $p < .005$) two-way

interaction between Race of S and Same vs. Different Race of E for S's Silence are given in Figure 5. When Ss are white, Ss interviewed by an E of different race have longer average durations of silence during the interview than Ss interviewed by an E of same race. The opposite occurs when Ss are Negro. In this case, Ss interviewed by an E of different race have shorter average durations of silence than Ss interviewed by an E of same race. Clearly, the significant Race of S main effect ($F = 12.45$, $p < .001$) is not a consistent effect. White and Negro Ss do not differ significantly in the different race of E condition. It is only when the white S is interviewed by the white E and when the Negro S is interviewed by the Negro E that the two racial groups differ greatly in average length of silence.

Cell means involved in the triple interactions for S's Units, E's Units, S's Time, and S's Action are presented in Table 3. Inspection of the means of same and different groups for each race within each level of prejudice shows that, with the exception of the white low prejudiced groups, the direction of mean changes on the verbal interaction variables tended to be in the predicted direction. That is, on the average those Ss who were interviewed by an E of different race tended to be inhibited in their verbal behavior as compared to comparable Ss interviewed by an E of same race, exhibiting increases in S's Units, and E's Units, and decreases in S's Time and S's Action.

To determine if directional changes were significant critical mean differences (Lindquist, 1953) were computed for

TABLE 3

Means of
Prejudice X Same Vs. Different Race of E X Race of S
Cells

Race of S	High Prejudice		Low Prejudice	
	Same	Different	Same	Different
		S's Units		
White	75.92	83.08	88.50	55.67
Negro	79.58	89.58	66.08	74.25
		E's Units		
White	56.00	68.67	63.50	44.25
Negro	68.67	68.83	55.00	57.50
		S's Time		
White	17.58	15.21	15.65	19.75
Negro	12.94	14.33	16.95	15.65
		S's Action		
White	.2530	.2107	.1978	.4126
Negro	.1787	.1624	.2982	.2270

each of the four variables. In the computation of the critical difference for each variable, the average within cells variance for all 16 groups and the critical value of t for a one-tailed test at the .01 level for 80 degrees of freedom were used.

Table 4 contains a summary of critical difference tests between the means of same and different groups for each race within each level of prejudice. The mean difference between highly prejudiced white Ss interviewed by an E of same race (Group HSW) and highly prejudiced white Ss interviewed by an E of different race (Group HDW) exceeded the critical value for two of the four variables, S's Time and E's Units. The difference between the means of highly prejudiced Negro Ss interviewed by a Negro E (Group HSN) and those interviewed by a white E (Group HDN) was significant only for S's Units. Negro low prejudiced Ss in the two conditions of same and different race of E (LSN vs. LDN) showed a significant mean difference only for S's Action. However, the mean changes of the white low prejudiced groups (LSW vs. LDW), which were in the unexpected direction, were significant for all four variables. Thus, in terms both of magnitude of mean differences and in terms of number of significant differences, race of E seems to have had the most effect upon the white Ss of low prejudice and in a direction opposite to that predicted. Furthermore, the expectations were that race of E would have the greatest effect upon Negro Ss and upon Ss of high prejudice.

Inspection of the means of high and low prejudice groups

of each race within each level of same and different race of E (Table 3) shows that, with the exception of Ss in the white-same condition, the direction of mean changes tended to be in the favor of the low prejudice Ss, i.e., a decrease in S's Units and E's Units and an increase in S's Time and S's Action from high to low prejudice. Critical mean difference tests were carried out to determine if these directional changes were significant. Table 5 summarizes these tests. Groups of the same race who were interviewed by a member of their own race were not expected to differ significantly according to prejudice. However, for white groups interviewed by a white E (Groups HSW and LSW) there were significant mean differences for two of the variables, S's Units and E's Units. For these groups there were reliable increases in E's and S's Units from high to low prejudice. Negro groups interviewed by an E of same race (Groups HSN and LSN) also showed significant mean changes, but in the opposite direction. For Negro-same Ss there were significant decreases in S's Units and E's Units and a significant increase in S's Action from high to low prejudice. Comparing white groups interviewed by an E of different race (Groups HDW and LDW), mean differences were significant for all four variables and in the expected direction. Low prejudiced white Ss obtained lower mean scores on S's Units and E's Units and higher mean scores on S's Time and S's Action than did white highly prejudiced Ss. Mean differences between the Negro groups interviewed by a white E (Groups HDN and LND) were significant for two of the variables,

TABLE 4

Summary of Critical Difference Tests for Same and Different Groups of Each Race within Each Level of Prejudice (df = 80)

Compared Groups	S's Time	S's Action	S's Units	E's Units
HSW vs. HDW	2.37*	.0423	7.16	12.67*
HSN vs. HDN	1.39	.0163	10.00*	.16
LSW vs. LDW	4.10*	.2148*	32.83*	19.25*
LSN vs. LDN	1.30	.0712*	8.17	2.50

*$p < .01$, one tailed.

TABLE 5

Summary of Critical Difference Tests for High and Low Prejudice Groups of Each Race within Each Level of Same and Different Race of E (df = 80)

Compared Groups	S's Time	S's Action	S's Units	E's Units
HSW vs. LSW	1.93	.0552	12.58*	7.50*
HSN vs. LSN	2.01	.1195*	13.50*	13.67*
HDW vs. LDW	4.54*	.2019*	27.41*	24.42*
HDN vs. LDN	1.32	.0646	15.33*	11.33*

*$p < .01$, one-tailed.

S's Units and E's Units, and were also in the expected direction. From Table 5, it seems that in terms of the magnitude of mean differences and the number of significant differences, the effect of prejudice tended to be greater in the white-different condition than in the Negro-different race of E condition.

Comparison of the means of white and Negro groups in the same and different conditions within each level of prejudice shows that, with the exception of low prejudiced Ss in the same race of E condition, mean differences tended to be in the predicted direction. That is, white Ss obtained lower mean scores on S's Units and E's Units and higher mean scores on S's Action and S's Time than did Negro Ss in comparable conditions of race of E and prejudice. To determine if these directional changes were significant, tests of critical mean differences were computed. These tests are summarized in Table 6. Highly prejudiced white and Negro Ss interviewed by an E of same race (Groups HSW and HSN) differed significantly in the expected direction on three of the variables: S's Time, S's Action, and E's Units. Negro and white highly prejudiced Ss interviewed by an E of different race (Groups HDW and HDN) did not differ significantly on any of the variables. Low prejudiced Ss interviewed by an E of same race (Groups LSW and LSN) differed reliably on three variables, but in the unexpected direction, i.e., whites obtained a lower mean score on S's Action and higher mean scores on S's Units and E's Units than did Negroes. However, Negro and white low prejudiced Ss interviewed by an E of different race (Groups

LDW and LDN) differed significantly on all four variables and in the expected direction. Thus, Negroes and whites differed significantly on three or more variables in three out of the four combinations of prejudice and same vs. different race of E. While highly prejudiced Negroes and whites differed when interviewed by an E of same race, highly prejudiced Ss of the two races did not differ when interviewed by an E of different race. However, whites and Negroes of low prejudice differed in both conditions of same and different race of E, seemingly because of the peculiar (as compared to all other groups) verbal interaction behavior of the white low prejudiced Ss in the two conditions.

Table 7 presents the means of cells involved in the significant two-way interaction between Same vs. Different Race of E and Race of S for S's Silence as well as differences between these means. Tests of critical difference found all means to differ significantly except for those of whites interviewed by a Negro E and of Negroes interviewed by a white E. The direction of change between white-same race of E Ss and white-different race of E Ss was in the unexpected direction, i.e., an increase in silence in the different race of E condition. The greatest difference between the two races occurred in the same race of E condition. However, it is interesting to note that had only white Es or only Negro Es been used in this study, the results would probably have indicated a significant and consistent race of S main effect, with Negroes showing more

TABLE 6

Summary of Critical Difference Tests for White and Negro Groups in the Same and Different Conditions within Each Level of Prejudice (df = 80)

Compared Groups	S's Time	S's Action	S's Units	E's Units
HSW vs. HSN	4.64*	.0743*	3.66	12.67*
HDW vs. HDN	.88	.0483	6.50	.16
LSW vs. LSN	1.30	.1004*	22.42*	8.50*
LDW vs. LDN	4.10*	.1856*	18.58*	13.25*

*$p < .01$, one-tailed.

TABLE 7

Means and Summary of Mean Difference Tests for Same Vs. Different Race of E X Race of S Cells for S's Silence (df = 80)

Group Means	Compared Groups	DW	SN	DN
Same-white = .0890	SW	.0146*	.0301*	.0165*
Diff-white = .1036	DW		.0155*	.0019
Same-Negro = .1191	SN			.0136*
Diff-Negro = .1055				

*$p < .01$, one-tailed.

silence in the interview.

Not affected by significant interaction effects are the significant Es-1 vs. Es-2 main effects for four of the variables: E's Units ($p < .001$), S's Time ($p < .005$), S's Action ($p < .005$), and S's Silence ($p < .001$). Inspection of marginal means of Es-1 and Es-2 for these variables (Table 8) reveals that the Es-1 spoke more often than the Es-2 and that Ss talked less using shorter durations of speech and longer durations of silence to Es-1 than to Es-2. These findings of differences between the Es was unexpected. The assumption was that Es following the same interview rules would obtain similar results from similar Ss. As a check on the standardized behavior of the four Es in the present study, inspection was made of the average duration of speech per utterance (Action) of each of the Es for their respective interviews. The raw data for E's Action is presented in Table J of Appendix C. The 96 Ss were divided into four groups according to their respective E. Inspection of the Es' speech behavior with each S indicates that they successfully followed the standardized procedure of speaking only in utterances of approximately five seconds. While, not surprisingly, there was some variability in the Es' speech behavior from S to S and from E to E, each E's distribution of 24 mean utterances showed only a small range on either side of five seconds. The largest range of any E was from 4.4 to 5.4 seconds. Table J of Appendix C shows that the grand means of WE-1, NE-1, WE-2, and NE-2 were 4.9, 4.8, 4.8, and 4.8 seconds respectively. Scores for the four

TABLE 8

Marginal Means of Es-1 and Es-2

Variable	Es-1	Es-2
E's Units	66.88	53.73
S's Time	14.71	17.30
S's Action	.2026	.2825
S's Silence	.1131	.0954

*E*s were compared by means of a simple analysis of variance which resulted in a nonsignificant *F* of 1.23. Similarly, analysis of variance of *E*'s Action for the original 16 groups resulted in a total between groups *F* value of less than unity. These data suggest that the differences found between *E*s were not due to differences in conforming to the rules of the standardized interview.

CHAPTER V

DISCUSSION

The Attitude Scale and Prejudice--Initial Considerations

The results obtained on the Bogardus Social Distance Scale are important to any discussion of the effects of the independent variables in this study, since the original selection of subjects was based upon scores obtained from the administration of this test. Several possibly valid criticisms of this study could be made based upon the nature of the distributions of test scores for whites and for Negroes and, thus, upon the subsequent selection of the subjects.

The scores obtained on the attitude test were not normally distributed for either white or Negro high school students. Furthermore, the distributions of scores for the two races were completely opposite to one another. By far the most frequent rating given the American Negro by white students was at the extreme negative end of the scale (i.e., 49% of the white students responded that they would exclude members of the Negro race from this country). On the other hand, by far the most frequent rating given the white American by Negro students was at the extreme positive end of the scale (i.e., 45% of the

Negro students responded that they would be willing to marry or have members of their family marry a white person). In contrast, only .5% of the white students rated Negroes at the extreme positive end of the scale, and only 1% of the Negro students rated whites at the extreme negative end of the scale. The facts that the distributions for the two races were this markedly skewed and that they were skewed in opposite directions posed problems in determining cut-off points for high and low prejudiced groups.

The rationale for determining high and low prejudiced members of the two racial groups was based upon several considerations. Certainly, it would have been most beneficial to this study had a large enough sample been available so that more scorers could have been obtained at the scarce end of the distribution for each race. Unfortunately, it is impossible to know where the neutral point on an attitude scale lies, e.g., where anti-Negro ends and not anti-Negro begins. If information on the neutral point on the Bogardus Scale had been available, the cut-off points for extreme prejudice and extreme nonprejudice for the two distributions could have been made with more certainty of correctness. In view of the extreme skewedness of the distributions, however, it appeared justifiable to assume that it would not take much deviation of a score from the norm for it to represent an extreme attitude. Therefore, this was the rationale upon which the divisions into high and low prejudices were made.

On the basis of the nature of the distributions of scores for the two races, however, one might contend that the attitude scale used was not a valid one. Undoubtedly, it seems unusual in this time of civil rights movements and racial unrest that so few Negro students would admit to feelings of antipathy toward the white American. Furthermore, that more did not admit to negative feelings is in disagreement with recent studies of the attitudes of the Negro reported earlier in this paper (e.g., Prothro & Jensen, 1952). Similarly, it may seem unlikely that so many white students would not even admit a willingness to grant the Negro citizenship in this country. This finding also contradicts the findings of recent investigations (e.g., Fagan & O'Neill, 1965). To delve into the possible reasons for the results obtained on the attitude scale is beyond the scope of this study. However, the question of the validity of the scale is quite pertinent to this investigation. The fact that high and low prejudice groups selected on the basis of the attitude scores did in fact differ in terms of the verbal interaction behaviors as measured in this study suggests strongly that, in spite of possible biases, the scale did indeed discriminate. However, it seems likely that even greater differences on the interaction variables could have been found had a larger sample of testees permitted a greater range of scores to exist between the cut-off points for levels of prejudice. Particularly for the Negro students, there was little difference between scores designating high prejudice and those designating low prejudice.

The latter could possible be the reason that fewer significant differences on the criterion measures were found between high and low prejudiced Negro Ss than between high and low prejudiced white Ss.

However, it should also be noted that an event which occurred during the course of this study may have had a profound effect upon the previously measured racial attitudes of both Negro and white subjects. On April 4, 1968, Dr. Martin Luther King, Jr. was assassinated in Memphis, Tennesse. At that time, only approximately one-third of the subjects of each race had been interviewed. Immediately following the slaying of Dr. King, disruptive behavior occurred at the larger of the two Negro high schools participating in this study. During the week which followed his death, many Negro students were not attending school. Three highly prejudiced Negro students who were interviewed the day after the assassination somewhat surprisingly discussed freely and quite openly their feelings about and reactions to the assassination to a white interviewer. It is felt that content analysis of the subsequent interviews of white students would also reveal a deep concern about the event. Unfortunately, the extent to which the assassination of Dr. King reversed, exacerbated, or otherwise altered previously existing racial attitudes cannot be determined. It is just as difficult to say what the result was upon subsequent verbal interaction behavior.

There is one further problem presented by the results obtained on the attitude scale. Comparison of the verbal interaction

behavior of Negroes and whites may be complicated by the fact of differences in the selection of subjects for the two racial groups. Of necessity, because white and Negro distributions of attitude test scores were skewed in opposite directions, the cut-off points for high and low prejudice were different for the two races. Thus, for example, while Negro subjects of low prejudice all had a score of 1 on the attitude scale, white subjects of low prejudice had scores which ranged from 1 to 5. Although racial comparisons were not considered to be ideal under these circumstances, they were felt to be justifiable to some extent because the selected subjects did represent either high or low prejudiced individuals for their respective race. Still, one could speculate that the significant verbal interaction differences found in this study between racial groups may not have relfected racial differences, but rather differences in prejudice. But, one then needs to account for the finding of no differences in interaction behavior between highly prejudiced white and Negro subjects in the different race of E condition. These findings will be discussed later in greater detail.

The Effects of Prejudice, Race of S, and Same vs. Different Race of E

The absence of consistent effects of prejudice, race of S, or same vs. different race of E upon the criterion measures suggests that none of these independent variables in and of itself was crucial in promoting the behavioral differences

measured in this study. The significant three-way interactions between these independent variables were unexpected as was the nature of these interactions. The data failed to uphold two important assumptions underlying the predictions of this study. First, it was assumed that Ss interviewed by an E of different race would be inhibited in the interview regardless of race of S or prejudice, i.e., any difference between Race of S X Prejudice groups interviewed by an E of same race and comparable groups interviewed by an E of different race would be only a matter of degree and not a matter of direction. This assumption did not hold only for the white low prejudiced Ss, whose verbal behavior apparently was markedly facilitated in the presence of a Negro E and comparatively inhibited in the presence of a white E. While the other Race X Prejudice groups showed statistically demonstrable differences in the predicted direction from same to different race of E, the white low prejudice groups most persistently differed in these two conditions and in the unexpected direction.

One might try to explain this result in the following way. Whites who are less prejudiced toward the Negro may, by talking a great deal to him, be attempting to show that they do not consider him inferior. In doing so, they may tend to try too hard to show their lack of prejudice. Also involved in this over-effort may be an attempt to compensate for what they consider to be the injustices afforded the Negro by most of

their fellow whites. On the other hand, Negroes who are less prejudiced toward the white, while still talking more to a white E than their highly prejudiced counterparts, may still be somewhat inhibited in his presence because they perceive themselves to be of lower social status.

The finding of few significant differences on the interaction variables between the same and the different race of E conditions for comparable Race of S X Prejudice groups (except for those between whites of low prejudice) was disappointing. It was particularly disappointing in the case of the Negro groups. Even the highly prejudiced Negro Ss showed fewer significant differences in the two conditions of race of E than did comparable white highly prejudiced Ss. Several explanations seem plausible. Regardless of the race of their interviewer, Negroes were being interviewed in a setting which they would naturally associate primarily with the white race--the University of Alabama. It is not known to what extent a "white" setting may have inhibited the Negro high school student's behavior even when he was interviewed by a Negro. There is also the possibility that the Negro S, particularly the highly prejudiced, may have been more leery of and, thus, to some extent inhibited by the Negro E because of his association with the white setting. One is also led to speculate concerning the social distance between the Negro high school student and the higher status (in terms of education, achievement, and age) Negro E as compared to the social distance between the white

high school student and the higher status white E. Unfortunately, at present proportionately fewer Negroes than whites obtain the education and achievement levels of the Es. Thus, a greater feeling of social distance may have existed between Negroes than between whites in the interview situation, resulting in the Negro S being somewhat inhibited even with a member of his own race. If, for any of these reasons or for any other reason, the Negro S's behavior was to any appreciable extent inhibited with a Negro E, there would be little reason to expect a great difference in his behavior in the same and different race of E conditions. However, another explanation might be that in this study different race of E had more of a surprise effect upon whites than upon Negroes. For, it seems logical that both the whites and the Negro S could have expected to be interviewed by a white E. Not only the fact that the interview was to take place at the University could have led to that expectation, but also the fact that all Ss were taken from their schools to the University for the interview by a white person. The presence of a Negro E could have up-ended the expectancies of both Negro and white Ss. Thus, the condition of different race of E could have had a greater effect upon the behavior of whites than Negroes because of prior assumptions concerning race of E. White Ss could have been surprised by a Negro E, while Negro Ss could have been prepared for a white E.

The second important assumption not upheld by the results of this study was concerned with prejudice. It was assumed that

Ss interviewed by a member of their own race would differ little, if any, on the interaction variables according to prejudice. Yet, findings of significant differences between high and low prejudice groups in the same race of E condition would not have been too surprising had the direction of mean changes been consistent for both races and consistent with the directional mean changes found in the different race of E condition. For, even though substantiating empirical evidence is meager, much has been theorized concerning the relationship between prejudice and personality maladjustment (e.g., see Sargent & Williamson, 1958, pp. 584-589). And, the value of the standardized interview in discriminating between nosological groups is well supported by the evidence reported in the introductory section of this thesis. Previous data has indicated that various emotionally disturbed groups show significantly less verbal productivity (or more verbal inhibition) in the interview than do groups of normals in terms of noncontent interaction variables (Matarazzo & Saslow, 1961). The fact is that in the present study the directions of the significant mean differences between high and low prejudiced Ss in the Negro-same, white-different, and Negro-different treatment combinations were quite similar to those previously shown to exist between patient and normal groups. These data considered alone would lend considerable support to the notion that prejudice is related negatively to personality adjustment. However, the differences in verbal behavior of high and low Ss in the white-same treatment condition,

which were also significant, showed a completely opposite directional trend. The white highly prejudiced Ss was more verbally productive than the white S of low prejudice when both were interviewed by a white E. This reversal in directional mean changes was not a function of the verbal interaction behavior of the white-high-same Ss, whose behavior was quite in keeping with that of the other highly prejudiced Ss. Rather, it resulted from the unusual behavior of the white low prejudiced S when interviewed by a white E.

The behavior of the low prejudiced white S in the same race of E condition is difficult to interpret, particularly when compared to the behavior and the relationships between the behaviors of all other Race of S X Prejudice X Same vs. Different Race of E groups. However, it must be remembered that none of the Ss in this study came to be interviewed of their own volition. This possibly could be a fault in the present investigation. Previous studies using the standardized interview have often used as Ss clinical patients or job applicants for whom the interview served some purpose. Therefore, one possible explanation for the behavior of the white-low-same Ss is that they felt little pressure to perform in (or to conform to) the interview situation. These Ss may have been too comfortable in this situation with a member of their own race. On the other hand, Negro-low-same Ss may have had a greater desire to perform because of the relative uniqueness for them of being involved in a research. A great deal of the research emanating from the

University of Alabama has involved elementary and secondary students from the surrounding area; however, it seems that the majority of it has involved the white schools. Also, as compared to the white-low-same Ss, highly prejudiced white Ss interviewed by a white E could have felt more of a need to conform because of their authoritarian characteristics. From an authoritarian viewpoint these Ss would have looked upon the white E as an authority figure and would have felt some pressure to perform as expected.

In contrast to an earlier study (Dinoff et al., 1968), the present investigation revealed no consistent overall differences between Negroes and whites on the verbal interaction variables. Only when the data were broken down into Prejudice X Same vs. Different Race of E groups did differences between the two races become apparent. Again, however, differences were not consistent across groups. Highly prejudiced whites talked significantly more than highly prejudiced Negroes only when whites were interviewed by whites and Negroes were interviewed by Negroes. Highly prejudiced Negroes and whites did not differ when interviewed by Es of different race. If, as discussed earlier, Negro Ss were inhibited by a member of their own race as well as by a member of a different race, then the fact that differences between the two highly prejudiced racial groups occurred only in the same race of E condition could be easily explained.

White and Negro groups of low prejudice differed in both

conditions of same and different race of E. But, in the same race of E condition Negroes talked more than whites, while in the different race of E condition whites talked more than Negroes. For these low prejudiced groups, both the differences between the races and the contradictory directions of the differences for the same and different conditions seem to result primarily from the unusual behavior of the white Ss of low prejudice. These results suggest strongly that findings of racial differences may be related in a complicated fashion not only to the race of the experimenter but to the prejudice of the subjects.

General Conclusions. Only further research can determine the validity of the speculations made in the discussion concerning the results of this study. However, regardless of what the reasons may be, the findings suggest that race of subject, race of interviewer, and prejudice interact in complex ways. The nature and extent of the effect of any one of these variables upon verbal interaction behavior appears to depend upon the nature of the combination of that variable with the remaining two. For example, whether differences between racial groups are found at all or whether directional differences will favor one racial group over the other may not only depend upon whether subjects are of high or low prejudice but also upon whether the interviewer is of the same or of a different race. Similarly, the extent and direction of changes in verbal interaction behavior resulting from interviewers of same or different

race may depend upon the race and the prejudice of the subject. The results also provide evidence for the existence of behavioral differences between subjects of high and low prejudice as measured by an attitude test. However, whether subjects of low prejudice talk more than highly prejudiced subjects seems to depend upon their not being white and interviewed by a white E. The findings of this investigation also give considerable support to the notion that behavior can be predicted on the basis of attitude test scores. In the situation designed to elicit the attitude (the different race of E condition), subjects of low prejudice consistently talked more than highly prejudiced subjects. Given an increased knowledge and understanding of the interactions between the three variables, it would appear that verbal interaction behavior could be predicted from attitude test scores in all of the conditions of this study.

The Effects of the Interviewer

One of the most important results of this investigation was the unexpected finding of significant Es-1 vs. Es-2 main effects on four of the criterion measures. Previous studies of the reliability of the standardized interview technique have led to the assumption that Es following the same interview rules will obtain similar results from similar subjects (Matarazzo et al., 1956); Saslow et al., 1955). The present evidence casts considerable doubt upon the veracity of this assumption. The reliability studies cited above used correlational statistical methods in the analysis of results, which may be one reason why

the assumption may not always be upheld. As pointed out by these investigators, one can obtain high correlation values when two interviewers elicit different amounts of a variable from the same subject, providing the relative amounts are maintained from subject to subject (i.e., each S holds his relative position in the distribution of scores). However, these authors presented strong arguments that their data demonstrated not only relative stability but absolute reliability as well.

On the basis of the subsequent assumption that any differences found between groups were probably not a function of interviewer differences, much standardized interview research has been carried out which has used different interviewers for different subject groups. The findings in the present study of interviewer differences seem to place some doubt upon the interpretations given the results in these investigations. For example, Matarazzo and Saslow (1961) found differences in verbal interaction behavior among five nosological groups. However, while the three patient groups were interviewed by the same male interviewer, the normal groups were interviewed by two other interviewers, both of them female. One cannot reasonably argue the reliability of the differences found among the patient groups. However, even though differences between these patient groups and the normal groups were quite large, they may have resulted at least to some extent from interviewer differences. This possibility is suggested not only from the results of the

present study, but also from the fact that so far generality of behavior from test to retest has not been investigated when interviewers differ in sex. Furthermore, Matarazzo and Saslow (1961) found statistically demonstrable differences between their two normal groups. The investigators' discussion of the possible reasons for these differences did not include the possibility of interviewer differences. In a similar manner, the investigation by Dinoff et al. (1968) may be criticized, because different interviewers were used for the white and the Negro school children. Only further research will determine the extent to which group differences in these and other studies are the result of interviewer differences. Certainly it would seem that the possibility of obtaining different results from different interviewers can no longer be ignored.

In view of the large number of groups involved in the present investigation, it seems unlikely that the differences obtained on the interaction variables by the different interviewers could be due entirely to Type S errors, i.e., that the Es-1, for example, were consistently assigned by chance those subjects who by nature talked less than those assigned to the Es-2. It would seem more plausible that the interviewers themselves differed upon some characteristic or characteristics which evoked different interaction patterns on the part of the subjects. In looking for similarities or differences among Es, one might first consider the factors of race, age, and background. Each level of E in this study consisted of a younger white interviewer

and an older Negro interviewer. Therefore, neither age nor race would appear to be the crucial determinant of the different results obtained by Es-1 from Es-2. However, one difference among interviewers is apparent in terms of background. Both NE-2 and WE-2 had considerable teaching experience, while Es-1 had none. It may be possible that teaching experience had some carry-over effect in the interview situation, e.g., in terms of the degree of "confidence" and/or "authority" conveyed by these interviewers. On the other hand, personality characteristics of the interviewers may have been the determining factor of the differential results. Regretfully, no personality measures were obtained on the interviewers. However, the investigator's knowledge of the interviewers used in this study leads to the conclusion that personality differences could be a possible explanation. Both NE-2 and WE-2 tend to immediately give the impression of being warm, out-going individuals, while both NE-1 and WE-1 tend to be more reserved and comparatively bland in affect. Whatever the reasons, however, the results of this study support the conclusion that different interviewers, even when they follow the rules of the standardized interview, may not obtain similar results. It is highly possible that different interviewers may evoke quite different affective responses, and thus, verbal interaction patterns from subjects.

Implications for Future Research

The results of this study offer further evidence of the value of the partially standardized interview as an assessment

instrument in clinical research. However, these results also accentuate the need for studying the interviewer as well as the subject in interview research. Further research should be designed to assess the interviewer effects found in this investigation. Subsequent research using two or more interviewers could investigate the relationship between objectively measured interviewer characteristics and subject verbal interaction behavior. Characteristics of interviewers could be varied along any number of dimensions, such as, age, sex, race, personality, background, and experience. In such studies a within subjects design might be most appropriate in order to insure that any effects are not due to group differences. Further positive results could lead to the conclusion that the interview technique needs even further standardization in order to lessen or perhaps even eradicate the effects resulting from differences between interviewers.

In investigations similar to the present one, investigators should be careful that the experimental setting itself does not have undesirable effects upon behavior. In the present study expectancies aroused by the setting may have produced an added dimension to certain experimental conditions. Had the experimental apparatus permitted, it probably would have been better if members of each race had been interviewed in their respective schools, in which case the expectancies of a same or different race of interviewer would probably have been the same for white and Negro subjects. Evidence that highly accurate interview

interaction measures can be taken from tape recordings suggests that future investigators could have greater freedom in the selection of settings for interviews.

It seems most probable that increased knowledge of the nature of interactions between race, prejudice, and the stimulating situation will come primarily from further attempts to predict behavior from existing attitude tests. The value of using noncontent verbal behavior to measure levels of prejudice has been clearly shown in the present study. Some of the parameters of this study could be varied along several dimensions. Thus, prejudice could be manipulated further to include more levels of the attitude or even to cover the entire range of attitude scores. The effects of various shades of skin color of interviewers upon prejudice groups could be investigated. Such manipulations within the context of the partially standardized interview may yield valuable information.

CHAPTER VI

SUMMARY

This investigation attempted to assess the effects of the race of the interviewer upon the noncontent verbal behavior of both white and Negro eleventh grade high school students. In addition, the role that the racial prejudice of the subject plays in determining these effects was explored.

Subjects of both races were divided into high and low prejudice groups on the basis of scores obtained on a paper and pencil attitude test--The Bogardus Social Distance Scale. Both Negroes and whites rated 15 ethnic groups on this test; however, only Negro ratings of white Americans and white ratings of Negro Americans were considered relevant to this research. Both high and low prejudiced subjects were then tested in a standardized interview situation by either a white or a Negro interviewer. Two interviewers of each race were used in order to control for individual differences between interviewers other than race.

Treatment groups were compared on the basis of six objective noncontent interaction measures. Only one of these measures, total interview time, proved to be insensitive to

behavioral differences. The results support the conclusion that race of subject, prejudice, and same or different race of E all can be important in determining interview interaction behavior; however, these variables interact in a complex manner. The extent and the direction of differences between groups being compared depends upon particular combinations of these variables. Inconsistent findings resulted from the unusual behavior of white subjects of low prejudice in the conditions of same and different race of E. In contrast with other groups, white low prejudiced Ss talked little to an E of same race and a great deal to an E of different race. The behavior of these subjects resulted in inconsistencies in directional differences when comparing high and low prejudice groups, same and different race of E groups, and white and Negro groups.

The results give support to the conclusion that in a situation designed to elicit the attitude (in this case the different race of E condition), behavior can be predicted from attitude test scores. Highly prejudiced Ss of both races talked less to an E of different race than did Ss of low prejudice. Significant differences in verbal behavior were also found between high and low prejudice groups in the same race of E condition; but the direction of differences was not similar for whites and Negroes. When E was of the same race, white highly prejudiced Ss talked more than white Ss of low prejudice; the reverse was true for the Negro subjects.

This investigation revealed no consistent overall differences between Negroes and whites in verbal interaction behavior. Differences were found only when comparisons were made between whites and Negroes in comparable prejudice x same vs. different race of E groups. These comparisons found highly prejudiced whites and highly prejudiced Negroes to differ significantly only when they were interviewed by Es of the same race. Furthermore, while low prejudiced Ss of the two races differed in both conditions of race of E, the direction of the differences was not the same in these two conditions. When low prejudiced Ss were interviewed by Es of same race, Negroes talked more than whites. The opposite occurred when low prejudiced Ss were interviewed by an E of different race. These results suggest strongly that findings of racial differences may be related in a complicated fashion not only to the race of the experimenter but to the prejudice of the subjects.

The results of this study also unexpectedly revealed significant interviewer effects other than those resulting from racial differences. These data were interpreted as indicating that different Es may evoke different verbal interaction patterns from subjects even when the interviewers follow the standardized rules of this interview technique.

The findings of this investigation were discussed in terms of the attitude test, the setting of the experiment, and other situational factors. The effects of the experimental treatments upon the groups were discussed and compared. Suggestions were

made for further research in the areas involved in this study.

APPENDICES

APPENDIX A

THE BOGARDUS SOCIAL DISTANCE SCALE

The Bogardus Social Distance Scale

Name: _____ School: _____

Grade: _____ Date of birth: _____

Age: _____ Sex: _____ Race: _____

Occupation of father: _____

Occupation of mother: _____

Religious preference: _____

After completing the above information and the social distance scale on the next page, please separate the two pages. Turn the pages in separately to your teacher. In this way only one person, the researcher, will know how you answered the social-distance scale. Your answers will be held in strictest confidence. The researcher could be penalized by his professional association if this confidence is not preserved. Further, the researcher is not interested in your responses as an individual. His interest is focused upon group data based upon a large number of individuals. The above information is required for correlational data. Your name is necessary in order to obtain additional information (e.g., other test scores) at a later date for correlational purposes.

This test relates to a special form of social distance known as personal-group distance, or the distance that exists between a person and groups, such as races, occupations, and religions. By taking this test at intervals of six months or a year, a person can discover what some of the changes in attitudes are that he is undergoing. If given to a group at intervals, changes in group attitudes may likewise be gauged.

You are urged to give yourself as complete freedom as possible. In fact, the greater freedom you give yourself, the more valuable will be the results. In every instance give your first feeling reactions. Proceed through the test without delaying. The more you "stop to think," the less valuable will be the results. Think of an "average member" of each ethnic group. Do not give your reactions to the best or worst members you have known.

Thirteen kinds of social contacts are given. Each of these kinds of social contact has been given a number. You are to put a circle around one or more of the numbers following each group of people to show the classification to which you would admit them.

DIRECTIONS: Below are the names of a number of groups of people. According to your first feeling reaction to an average member of each of these groups of people (not the best or worst members you have known) encircle one or more of the numbers following the name of the group to show the classifications to which you would be willing to admit them. The numbers are to be interpreted:

1. I would be willing to marry or have members of my family marry a person in this group.
2. I would be willing to have a person of this group as a roommate.
3. I would be willing to have a person of this group as a close companion.
4. I would be willing to have a person of this group as a member of my social club.
5. I would be willing to have a person of this group as a good friend.
6. I would be willing to have a person of this group as a next door neighbor.
7. I would be willing to have a person of this group own property close to mine.
8. I would be willing to have a member of this group work with me as a business associate.
9. I would be willing to have a member of this group as a student in my school.
10. I would be willing to have a member of this group admitted to the same restaurants, theaters, hotels, etc., that I am.
11. I would be willing to have a member of this group as a speaking acquaintance only.
12. I would be willing to have a member of this group as a citizen of my country.
13. I would prefer to exclude members of this group from this country except for visits as tourists.

1.	Germans	1	2	3	4	5	6	7	8	9	10	11	12	13
2.	Japanese	1	2	3	4	5	6	7	8	9	10	11	12	13
3.	Japanese (American)	1	2	3	4	5	6	7	8	9	10	11	12	13
4.	French	1	2	3	4	5	6	7	8	9	10	11	12	13
5.	Chinese	1	2	3	4	5	6	7	8	9	10	11	12	13
6.	Chinese (American)	1	2	3	4	5	6	7	8	9	10	11	12	13

Page 2 of the Bogardus Scale--(Continued)

7.	Negroes (of Africa)	1	2	3	4	5	6	7	8	9	10	11	12	13
8.	Negroes (American)	1	2	3	4	5	6	7	8	9	10	11	12	13
9.	Russians	1	2	3	4	5	6	7	8	9	10	11	12	13
10.	White (Americans)	1	2	3	4	5	6	7	8	9	10	11	12	13
11.	Indians (of India)	1	2	3	4	5	6	7	8	9	10	11	12	13
12.	Indians (Americans)	1	2	3	4	5	6	7	8	9	10	11	12	13
13.	Mexicans	1	2	3	4	5	6	7	8	9	10	11	12	13
14.	Mexicans (Americans)	1	2	3	4	5	6	7	8	9	10	11	12	13
15.	Vietnamese	1	2	3	4	5	6	7	8	9	10	11	12	13

Note--All racial groups were presented on a single page (Page 2) of the form that was administered.

APPENDIX B

CHARACTERISTICS OF THE PARTIALLY STANDARDIZED INTERVIEW AND RULES FOR THE PARTIALLY STANDARDIZED INTERVIEW

CHARACTERISTICS OF THE PARTIALLY STANDARDIZED INTERVIEW

Period	Type of Interviewing	Duration of Period	
		Fixed	Variable
1	Free give and take	5 min.	
2	Stress (Silence)		12 failures to respond or 10 min., whichever is shorter
3	Free give and take	5 min.	
4	Stress (Interruption)		12 interruptions or 10 min., whichever is shorter
5	Free give and take	5 min.	

Rules for the Partially Standardized Interview

Periods 1 to 5 (all periods):

a. Interviewer introduces each period by a 5-second utterance (following his signal to the observer).

b. All interviewing must be nondirective. No direct questions, no probing or depth interviewing. Interviewer can reflect, ask for clarification, ask for more information, introduce a new topic area, etc. In general, interviewer's comments should be nonchallenging and open-ended and related to the subject's past comments or to some new, general topic.

c. All interactions must be verbal only, or verbal and gestural at the same time; i.e., interviewer cannot use head nods and other gestures alone. This rule simplifies observer's task.

d. All of interviewer's utterances must be of approximately 5-seconds' duration.

e. After subject finishes a comment or other interaction, interviewer must respond in less than 1 second, except as otherwise noted in Period 2.

f. Each time subject interrupts interviewer, the latter must continue to talk for 2 more seconds. This rule insures more explicit definition of a subject's ascendance-submission pattern than would be possible if interviewer "submitted" immediately.

Periods 1, 3, and 5:

a. Interviewer must never interrupt subject.

b. If after interviewer makes a comment subject does not respond, interviewer must wait 15 seconds and then speak again for 5 seconds.

Period 2 only:

a. Interviewer must "fail to respond" to last interaction of subject a total of 12 times (or for 10 minutes, whichever is shorter).

b. After interviewer has been silent for 15 seconds (and subject has not taken initiative) interviewer makes another 5-second comment.

Period 4 only:

a. Each time subject acts, interviewer must interrupt subject for 5 seconds for a total of 12 times.

b. Interviewer's interruption should begin about 3 seconds after subject has begun his interaction.

c. After having interrupted subject, if the subject continues through the interruption (does not submit), interviewer will not interrupt again until subject has finished his utterance, i.e., interviewer will interrupt subject only once during each utterance of the latter if subject does not "yield."

d. The Period is ended after 12 interruptions or 10 minutes of attempting to obtain these.

APPENDIX C

TABLES A THROUGH J

(All data involving time are expressed in minutes or decimal fractions of minutes.)

TABLE A

Frequency Distribution of Bogardus Scale Scores
For White Student Ratings of Negro Americans And
For Negro Student Ratings of White Americans

Score	White Students		Negro Students[a]		
1	1		62	(14)	Low Prejudice
2	13	Low Prejudice	49	(10)	
3	4		4		
4	7		4		
5	6		6	(2)	
6	0		1		
7	3		0		High Prejudice
8	10		0		
9	12		2		
10	4		3	(1)	
11	37		6	(2)	
12	13		0		
13	104	High Prejudice	2	(2)	
Total	214		139	(31)	

[a] The number of Negro students who attended Riverside High School are presented in parentheses.

TABLE B

Bogardus Social Distance Scale Scores
By Groups

Subject	White Groups				Negro Groups			
				High Prejudice				
	I	II	V	VI	III	IV	VII	VIII
1	13	13	13	13	4	10	9	4
2	13	13	13	13	5	11	5	11
3	13	13	13	13	11	6	4	4
4	13	13	13	13	10	5	9	5
5	13	13	13	13	13	5	10	11
6	13	13	13	13	5	11	11	13
Mean	13	13	13	13	8	8	8	8
				Low Prejudice				
	IX	X	XIII	XIV	XI	XII	XV	XVI
1	2	2	2	2	1	1	1	1
2	2	2	2	3	1	1	1	1
3	4	4	3	2	1	1	1	1
4	4	4	5	4	1	1	1	1
5	2	2	2	1	1	1	1	1
6	2	2	3	4	1	1	1	1
Mean	2.67	2.67	2.83	2.67	1	1	1	1

TABLE C

Total Time

Es	Subject	High Prejudice				Low Prejudice			
		Same		Different		Same		Different	
		White	Negro	White	Negro	White	Negro	White	Negro
Es-1	1	26.08	24.05	22.13	22.16	21.35	21.97	26.57	23.27
	2	26.36	25.36	23.10	24.11	20.98	27.07	24.35	24.71
	3	23.49	20.92	26.58	24.08	22.40	25.20	25.39	26.53
	4	21.92	22.61	22.68	21.22	21.40	25.61	26.86	20.25
	5	20.71	21.21	24.62	27.93	27.12	21.59	23.95	18.87
	6	26.33	22.56	26.51	19.40	26.26	26.54	25.52	22.91
	Mean	24.15	22.79	24.27	23.15	23.25	24.66	25.44	22.76
	S.D.	2.47	1.69	1.95	2.95	2.72	2.33	1.16	2.82
Es-2	1	19.61	22.57	23.16	24.33	18.96	21.59	26.47	22.78
	2	26.54	22.96	21.70	21.81	26.34	26.72	26.57	27.03
	3	26.06	22.14	22.37	26.44	22.32	21.95	23.35	23.77
	4	27.25	26.21	26.63	22.74	26.16	25.31	24.09	26.82
	5	26.63	26.27	25.94	22.08	23.21	20.94	26.25	23.48
	6	26.46	20.68	26.63	23.33	21.87	26.73	26.18	26.00
	Mean	25.43	23.47	24.41	23.46	23.14	23.87	25.49	24.98
	S.D.	2.87	2.28	2.25	1.72	2.80	2.68	1.39	1.85

TABLE D

S's Units

Es	Subject	High Prejudice				Low Prejudice			
		Same		Different		Same		Different	
		White	Negro	White	Negro	White	Negro	White	Negro
Es-1	1	86	79	91	89	95	74	53	80
	2	74	78	120	93	118	45	64	76
	3	75	86	66	99	77	79	65	76
	4	92	79	100	91	87	63	37	76
	5	101	119	96	77	72	89	67	66
	6	71	88	97	84	59	64	71	70
	Mean	83.17	88.17	95.00	88.83	84.67	69.00	59.50	74.00
	S.D.	11.86	15.66	17.39	7.60	20.50	15.24	12.55	5.06
Es-2	1	95	71	99	77	139	62	24	108
	2	64	60	58	93	70	61	44	46
	3	76	82	91	95	95	79	74	61
	4	54	65	45	81	78	58	67	62
	5	55	54	71	92	62	89	46	75
	6	68	94	63	104	110	30	56	95
	Mean	68.67	71.00	71.17	90.33	92.33	63.17	51.83	74.50
	S.D.	15.31	14.81	20.46	9.83	28.71	20.25	17.94	23.21

TABLE E

S's Units

Es	Subject	High Prejudice				Low Prejudice			
		Same		Different		Same		Different	
		White	Negro	White	Negro	White	Negro	White	Negro
Es-1	1	74	75	84	66	73	62	52	63
	2	53	68	111	72	86	43	52	59
	3	64	80	57	76	59	79	54	62
	4	78	65	85	76	73	49	35	58
	5	73	115	76	57	64	75	58	52
	6	52	81	82	61	46	54	63	58
	Mean	65.67	80.67	82.50	68.00	66.83	60.33	52.33	58.67
	S.D.	11.18	17.99	17.40	7.98	13.76	14.39	9.48	3.88
Es-2	1	65	54	79	54	86	45	18	83
	2	39	55	39	68	42	39	35	31
	3	52	57	76	63	67	65	61	46
	4	38	63	36	64	47	51	40	54
	5	46	41	46	83	47	69	28	67
	6	38	70	53	86	72	29	35	57
	Mean	46.33	56.67	54.83	69.67	60.17	49.67	36.17	56.33
	S.D.	10.71	9.73	18.54	12.40	17.50	15.32	14.36	17.77

TABLE F

S's Time

Es	Subject	High Prejudice				Low Prejudice			
		Same		Different		Same		Different	
		White	Negro	White	Negro	White	Negro	White	Negro
Es-1	1	14.67	12.60	11.57	14.41	10.65	14.64	19.39	13.03
	2	20.12	16.55	7.81	15.82	9.91	20.19	17.66	14.50
	3	13.47	9.05	20.25	14.99	13.55	13.99	17.57	17.45
	4	8.70	13.98	12.14	9.60	11.45	19.94	23.35	12.27
	5	8.23	4.87	15.59	18.59	19.42	12.10	15.72	12.70
	6	21.26	10.99	16.43	12.45	21.27	19.08	16.47	15.59
	Mean	14.41	11.34	13.97	14.31	14.38	16.66	18.36	14.26
	S.D.	5.50	4.07	4.36	3.06	4.82	3.50	2.74	2.00
Es-2	1	12.59	14.98	10.58	17.66	11.12	15.87	25.12	11.65
	2	23.00	14.21	16.59	13.77	22.90	21.99	22.04	23.48
	3	19.49	12.77	12.55	18.57	14.37	12.66	14.97	17.04
	4	24.20	13.25	22.25	13.56	20.91	16.88	18.68	18.18
	5	21.91	22.45	18.30	11.07	17.15	11.98	23.60	12.99
	6	23.35	9.56	18.44	11.44	15.07	24.07	22.38	18.97
	Mean	20.76	14.54	16.45	14.35	16.92	17.24	21.13	17.05
	S.D.	4.32	4.30	4.26	3.13	4.37	4.90	3.70	4.29

TABLE G

S's Action

Es	Subject	High Prejudice				Low Prejudice			
		Same		Different		Same		Different	
		White	Negro	White	Negro	White	Negro	White	Negro
Es-1	1	.1706	.1595	.1271	.1619	.1121	.1978	.3658	.1629
	2	.2719	.2122	.0651	.1701	.0840	.4487	.2759	.1908
	3	.1796	.1052	.3068	.1514	.1760	.1771	.2703	.2296
	4	.0946	.1770	.1214	.1055	.1316	.3165	.6311	.1614
	5	.0815	.0409	.1624	.2414	.2697	.1360	.2346	.1924
	6	.2994	.1249	.1694	.1482	.3605	.2981	.2320	.2227
	Mean	.1829	.1366	.1587	.1631	.1890	.2624	.3350	.1933
	S.D.	.0891	.0603	.0815	.0444	.1061	.1152	.1530	.0287
Es-2	1	.1325	.2110	.1069	.2294	.0800	.2560	1.0467	.1079
	2	.3594	.2368	.2860	.1481	.3271	.3605	.5009	.5104
	3	.2564	.1557	.1379	.1955	.1513	.1603	.2023	.2793
	4	.4481	.2038	.4944	.1674	.2681	.2910	.2788	.2932
	5	.3984	.4157	.2577	.1203	.2766	.1346	.5130	.1732
	6	.3434	.1017	.2927	.1100	.1370	.8023	.3996	.1997
	Mean	.3230	.2208	.2626	.1618	.2067	.3341	.4902	.2606
	S.D.	.1130	.1068	.1378	.0455	.0971	.2441	.2987	.1403

TABLE H

S's Silence

Es	Subject	High Prejudice				Low Prejudice			
		Same		Different		Same		Different	
		White	Negro	White	Negro	White	Negro	White	Negro
Es-1	1	.1327	.1449	.1160	.0871	.1126	.0991	.1355	.1280
	2	.0843	.1129	.1274	.0891	.0938	.1529	.1045	.1343
	3	.1336	.1380	.0959	.0918	.1149	.1419	.1203	.1195
	4	.1437	.1092	.1054	.1277	.1144	.0900	.0949	.1050
	5	.1236	.1373	.0941	.1213	.1069	.1066	.1228	.0935
	6	.0714	.1315	.1039	.0827	.0846	.1166	.1275	.1046
	Mean	.1149	.1290	.1071	.1000	.1045	.1179	.1176	.1142
	S.D.	.0297	.0146	.0126	.0194	.0126	.0247	.0151	.0157
Es-2	1	.0739	.1069	.1271	.0866	.0564	.0923	.0563	.1031
	2	.0553	.1458	.0881	.0865	.0491	.0775	.1030	.0772
	3	.0864	.1143	.1079	.0828	.0837	.1176	.1132	.1103
	4	.0565	.1994	.0973	.1133	.0673	.1453	.0807	.1394
	5	.0858	.0707	.1076	.1197	.0977	.1007	.0576	.1399
	6	.0457	.1183	.1300	.1143	.0618	.0887	.0679	.0740
	Mean	.0673	.1259	.1097	.1005	.0693	.1037	.0798	.1073
	S.D.	.0172	.0434	.0164	.0169	.0182	.0244	.0238	.0288

TABLE I

Comparison of the Scoring of Live Interviews with the Scoring of Corresponding Tape Recordings

Subject	Group	S's Units		S's Time	
		Live Interview	Tape Recording	Live Interview	Tape Recording
1	XIII	11	11	3.94	3.99
6	XII	3	3	4.72	4.80
4	IX	20	20	2.64	2.85
3	VI	19	18	3.03	3.09
2	XVI	6	5	4.68	4.72
5	VII	11	12	3.75	3.64

TABLE J

E's Action

Race X Prejudice Group	S	WE-1	NE-1	WE-2	NE-2
	1	5.0	4.7	4.7	5.1
	2	4.6	5.0	4.7	4.8
White-high	3	5.0	4.8	4.8	4.3
	4	5.4	4.8	5.0	4.6
	5	5.1	4.5	4.8	4.9
	6	4.4	4.6	4.8	4.9
	1	4.9	5.0	4.6	4.7
	2	4.8	4.8	4.8	5.0
White-low	3	4.9	5.0	5.0	5.0
	4	4.7	4.5	5.2	4.5
	5	4.7	4.5	4.8	4.4
	6	4.6	5.0	4.4	4.9
	1	4.7	4.9	4.6	4.8
	2	4.8	4.7	4.6	4.9
Negro-high	3	4.8	4.8	4.9	4.9
	4	5.1	4.7	5.0	4.6
	5	4.8	4.8	5.3	4.5
	6	4.8	4.8	4.7	4.9
	1	5.4	4.6	4.8	4.6
	2	5.0	5.2	5.4	4.9
Negro-low	3	5.0	4.8	4.6	4.6
	4	4.8	4.5	4.6	5.1
	5	4.8	4.7	4.8	4.7
	6	4.6	4.7	5.0	4.6
	Sum	116.7	114.4	115.9	114.2
	Mean	4.9	4.8	4.8	4.8

Note--Values reported in seconds.

REFERENCES

REFERENCES

Allport, G. W. The historical background of modern social psychology. In G. Lindzey (Ed.), Handbook of social psychology. Cambridge, Mass.: Addison-Wesley, 1954. Pp. 3-56.

Bayton, J. A. Racial stereotypes of Negro college students. Journal of Abnormal and Social Psychology, 1941, 36, 97-102.

Bayton, J. A., & Byoune, E. F. Racio-national stereotypes held by Negroes. Journal of Negro Education, 1947, 16, 49-56.

Berg, K. R. Ethnic attitudes and agreement with a Negro person. Journal of Personality and Social Psychology, 1966, 4, 215-220.

Bogardus, E. S. Measuring social distance. Journal of Applied Sociology, 1925, 9, 299-308.

Bogardus, E. S. Immigration and race attitudes. Boston: Heath, 1928.

Bray, D. W. The prediction of behavior from two attitude scales. Journal of Abnormal and Social Psychology, 1950, 45, 64-84.

Campbell, D. T. Social attitudes and other acquired behavioral dispositions. In S. Koch (Ed.), Psychology: A study of a science. Vol. 6. Investigations of man as socius: Their place in psychology and the social sciences. New York: McGraw-Hill, 1963. Pp. 94-172.

Canady, H. G. The effect of rapport on the I.Q.: A new approach to the problem of racial psychology. Journal of Negro Education, 1936, 5, 209-219.

Chapple, E. D. The Interaction Chronograph; its evolution and present application. Personnel, 1949, 25, 295-307.

Chapple, E. D. The standard experimental (stress) interview as used in Interaction Chronograph investigations. Human Organization, 1953, 12, 23-32.

Chein, I., Deutsch, M., Hyman, H., & Jahoda, M. (Eds.) Consistency and inconsistency in intergroup relations. Journal of Social Issues, 5 (3), 1-63.

Cook, S. W., & Selltiz, C. A multiple-indicator approach to attitude measurement. Psychological Bulletin, 1964, 62, 36-55.

Cooper, J. B., & Pollock, D. A. The identification of prejudical attitudes by the GSR. Journal of Social Psychology, 1959, 50, 241-245.

Cooper, J. B., & Siegel, H. E. The galvanic skin response as a measure of emotion in prejudice. Journal of Psychology, 1956, 42, 149-155.

Cooper, J. B., & Singer, D. N. The role of emotion in prejudice. Journal of Social Psychology, 1956, 44, 241-247.

Davitz, J. R. (Ed.) The communication of emotional meaning. New York. McGraw-Hill, 1964.

Dinoff, M., Burkett, L. S., Griffin, J. L., & Gilbert, J. I. Standardized interview performance of Southern elementary school children. Psychological Reports, 1968, 22, 355-360.

Dinoff, M., Morris, J. R., & Hannon, J. E. The stability of schizophrenic speech in a standardized interview. Journal of Clinical Psychology, 1963, 19, 279-282.

Dinoff, M., Patterson, W. E., Hannon, J. E., & Morris, J. R. Standardized interview performance of regressed schizophrenics, non-medicated schizophrenics, and normals. Psychological Reports, 1967, 20, 119-123.

Dreger, R. M., & Miller, K. S. Comparative psychological studies of Negroes and whites in the United States. Psychological Bulletin, 1960, 57, 361-402.

Dreger, R. M., & Miller, K. S. Recent research in psychological comparisons of Negroes and whites in the United States. Paper presented at the meeting of the Southeastern Psychological Association, Atlanta, April, 1965.

Emery, F. E., Oeser, O. A., & Tully, J. Information, decision and action. Melbourne, Australia: Melbourne University Press, 1957.

Fagan, J., & O'Neill, M. A comparison of social-distance scores among college-student samples. Journal of Social Psychology, 1965, 66, 281-290.

Gray, J. S., & Thompson, A. H. The ethnic prejudices of white and Negro college students. Journal of Abnormal and Social Psychology, 1953, 48, 311-313.

Hannon, J. E. Changes in standardized interview behaviors as a function of brief stimulus deprivation and brief partial social isolation in normals and schizophrenics. Unpublished doctoral dissertation, University of Alabama, 1962.

Harding, J., Kutner, B., Proshansky, H., & Chein, I. Prejudice and ethnic relations. In G. Lindzey (Ed.), Handbook of social psychology. Cambridge, Mass.: Addison-Wesley, 1954. Pp. 1021-1061.

Hartley, E. L. Problems in prejudice. New York: King's Crown Press, 1946.

Hyman, H. H., Cobb, W. J., Feldman, J. J., Hart, C. W., & Stember, C. H. Interviewing in social research. Chicago: University of Chicago Press, 1954.

Kanfer, F. H., & Marston, A. R. The relationship between personality variables and verbal response characteristics. Journal of Clinical Psychology, 1962, 18, 426-428.

Kanfer, F. H., Phillips, J. S., Matarazzo, J. D., & Saslow, G. Experimental modification of interviewer content in standardized interviews. Journal of Consulting Psychology, 1960, 24, 528-536.

Katz, D., & Stotland, E. A preliminary statement to a theory of attitude structure and change. In S. Koch (Ed.), Psychology: A study of a science. Vol. 3. Formulations of the person and the social context. New York: McGraw-Hill, 1959. Pp. 423-475.

Katz, I. Review of evidence relating to effects of desegregation on the intellectual performance of Negroes. American Psychologist, 1964, 19, 381-399.

Katz, I. Factors influencing Negro performance in the desegregated school. In M. Deutsch, I. Katz & A. R. Jensen (Eds.), Social class, race, and psychological development. New York: Holt, Rinehart & Winston, 1968. Pp. 254-289.

Katz, I., & Benjamin L. Effects of white authoritarianism in biracial work groups. Journal of Abnormal and Social Psychology, 1960, 61, 448-456.

Katz, I., & Cohen, M. The effects of training Negroes upon cooperative problem solving in biracial teams. Journal of Abnormal and Social Psychology, 1962, 64, 319-325.

Katz, I., Epps, E. G., & Axelson, L. J. Effect upon Negro digit-symbol performance of anticipated comparison with whites and and with other Negroes. Journal of Abnormal and Social Psychology, 1964, 69, 77-83.

Katz, I., Goldston, J., & Benjamin, L. Behavior and productivity in biracial work groups. Human Relations, 1958, 11, 123-141.

Katz, I., & Greenbaum, C. Effects of anxiety, threat, and racial environment on task performance of Negro college students. Journal of Abnormal and Social Psychology, 1963, 66, 562-567.

Katz, I., Roberts, S. O., & Robinson, J. M. Effects of task difficulty, race of administrator, and instructions on Negro digit-symbol performance. Journal of Personality and Social Psychology, 1965, 2, 53-59.

Kramer, E. Judgment of personal characteristics and emotions from non-verbal properties of speech. Psychological Bulletin, 1963, 60, 408-420.

Kretch, D., Crutchfield, R. S., & Ballachey, E. L. Individual in society. New York: McGraw-Hill, 1962.

Kutner, B., Wilkins, C., & Yarrow, P. R. Verbal attitudes and overt behavior involving racial prejudice. Journal of Abnormal and Social Psychology, 1952, 47, 649-652.

LaPiere, R. T. Attitude vs. actions. Social Forces, 1934, 14, 230-237.

Lenski, G. E., & Leggett, J. C. Caste, class, and deference in the research interview. American Journal of Sociology, 1960, 65, 463-467.

Lindquist, E. F. Design and analysis of experiments in psychology and education. Boston: Houghton Mifflin, 1953.

Matarazzo, J. D. Prescribed behavior therapy: Suggestions from interview research. In A. J. Bachrach (Ed.), Experimental foundations of clinical psychology. New York: Basic Books, 1962. Pp. 471-509.

Matarazzo, J. D. The interview. In B. B. Wolman (Ed.), Handbook of clinical psychology. New York: McGraw-Hill, 1965. Pp. 403-450.

Matarazzo, J. D., & Saslow, G. Differences in interview interaction behavior among normal and deviant groups. In I. A. Berg & B. M. Bass (Eds.), Conformity and deviation. New York: Harper, 1961. Pp. 286-327.

Matarazzo, J. D., Saslow, G., & Guze, S. B. Stability of interaction patterns during interviews: A replication. Journal of Consulting Psychology, 1956, 20, 267-274.

Matarazzo, J. D., Saslow, G., & Hare, A. P. Factor analysis of interview interaction behavior. Journal of Consulting Psychology, 1958, 22, 419-429.

Matarazzo, J. D., Saslow, G., & Matarazzo, R. G. The interaction chronograph as an instrument for objective measurement of interaction patterns during interviews. Journal of Psychology, 1956, 41, 347-367.

Matarazzo, J. D., Saslow, G., Matarazzo, R. G., & Phillips, J. S. Stability and modificability of personality patterns during a standardized interview. In P. A. Hoch & J. Zubin (Eds.), Psychopathology of communication. New York: Grune and Stratton, 1958. Pp. 98-125.

Matarazzo, J. D., Weitman, M., & Saslow, G. Interview content and interviewee speech durations. Journal of Clinical Psychology, 1963, 19, 463-472.

McGuigan, F. J. The experimenter: A neglected stimulus object. Psychological Bulletin, 1963, 60, 421-428.

Meenes, M. A. A comparison of racial stereotypes of 1935 and 1943. Journal of Social Psychology, 1943, 17, 327-336.

Minard, R. D. Race relationships in the Pocahontas coal field. Journal of Social Issues, 1952, 8, 29-44.

Morris, J. R. The effects of problem-solving success and social reinforcement on the behavior of chronic schizophrenics. Unpublished doctoral dissertation, University of Alabama, 1963.

Pasamanic, B., & Knobloch, H. Early language behavior in Negro children and the testing of intelligence. Journal of Abnormal and Social Psychology, 1955, 50, 401-402.

Patterson, W. E., Jr. Effect of hypnotic suggestion upon schizophrenic speech patterns. Unpublished doctoral dissertation, University of Alabama, 1963.

Pettigrew, T. F. Social psychology and desegregation research. American Psychologist, 1961, 16, 105-112.

Pettigrew, T. F. A profile of the Negro American. Princeton, N. J.: Van Nostrand, 1964.

Phillips, J. S., Matarazzo, R. G., Matarazzo, J. D., Saslow, G., & Kanfer, F. H. Relationships between descriptive content and interaction behavior in interviews. Journal of Consulting Psychology, 1961, 25, 260-266.

Porier, G. W., & Lott, A. J. Galvanic skin responses and prejudice. Journal of Personality and Social Psychology, 1967, 5, 253-259.

Price, D. O , & Searles, R. Some effects of interviewer-respondent interaction on responses in a survey situation. Paper presented at the meeting of the American Statistical Association, New York, December, 1961.

Prothro, E. T., & Jensen, J. A. Comparison of some ethnic and religious attitudes of Negro and white college students in the deep South. Social Forces, 1952, 30, 426-428.

Rankin, R. E., & Campbell, D. T. Galvanic skin response to Negro and white experimenters. Journal of Abnormal and Social Psychology, 1955, 51, 30-33.

Rosenthal, R. Covert communication in the psychological experiment. Psychological Bulletin, 1967, 67, 356-367.

Saenger, G., & Gilbert, E. Customer reactions to the integration of Negro sales personnel. Journal of Opinion and Attitude Research, 1950, 4, 57-76.

Sarason, I. G. The human reinforcer in verbal behavior research. In L. Krasner & L. P. Ullmann (Eds.), Research in behavior modification: New developments and implications. New York: Holt, Rinehart and Winston, 1965. Pp. 229-243.

Sargent, S. S., & Williamson, R. C. Social Psychology. New York: Ronald Press, 1966.

Saslow, G., & Matarazzo, J. D. A technique for studying changes in interview behavior. In E. A. Rubenstein and M. B. Parloff (Eds.), Research in psychotherapy. Washington, D. C.: American Psychological Association, 1959. Pp. 125-159.

Saslow, G., Matarazzo, J. D., & Guze, S. B. The stability of Interaction Chronograph patterns in psychiatric interview. Journal of Consulting Psychology, 1955, 19, 417-430.

Saslow, G., Matarazzo, J. D., Phillips, J. S., & Matarazzo, R. G. Test-retest stability of interaction patterns during interviews conducted one week apart. Journal of Abnormal and Social Psychology, 1957, 54, 295-302.

Secord, P. F., Bevan, W., & Katz, B. The Negro stereotype and perceptual accentuation. Journal of Abnormal and Social Psychology, 1956, 53, 78-83.

Shaw, M. E., & Wright, J. M. Scales for the measurement of attitudes. New York: McGraw-Hill, 1967.

Trent, R. D. The color of the investigator as a variable in experimental research with Negro subjects. Journal of Social Psychology, 1954, 40, 281-287.

Vidulich, R. N., & Krevanick, F. W. Racial attitudes and emotional response to visual representations of the Negro. Journal of Social Psychology, 1966, 68, 85-93.

Westie, F. R., & DeFleur, M. L. Autonomic responses and their relationship to race attitudes. Journal of Abnormal and Social Psychology, 1959, 58, 340-347.

Williams, J. A., Jr. Interviewer-respondent interaction: A study of bias in the information interview. Sociometry, 1964, 27, 338-352.

Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill, 1962.