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PERSONAL SPACE ASSESSMENT OF THE DEVELOPMENT
OF RACIAL ATTITUDES IN INTEGRATED
AND SEGREGATED SCHOOLS

A Thesis
Presented to the
Faculty of
California State College,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Psychology

By
Diana Speelman

June 1978

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ABSTRACT

The present study examined the development of racial attitudes in young children in both integrated and segregated schools. A projective personal space measure was used as the assessment tool for racial attitudes in preschool, first, and third grade white males. Subjects projected personal space by placing a figure representing themselves however close they would like to be to figures of black and white stimuli. Analysis showed a significant effect for color of stimuli. The boys used greater distances toward the black stimulus than towards the white stimulus. Age of the subject was also significant. The amount of distance declined with age. The analysis indicated no differences between integrated and segregated schools.

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INTRODUCTION AND REVIEW OF LITERATURE

While the existence of social prejudice has been a subject of much academic analysis and discussion, there has been wide dispute among social scientists as to the methodology of diagnosing its origins. The basis for the study of racial prejudice is founded on the postulate that it is a learned response and therefore it might be altered or unlearned. To determine how and when social prejudice is learned, the studies to date have dealt with the examination of the racial preferences and associates of children. In these studies various responses have been examined to determine whether racial preferences exist among children and, if so, at what age they have been developed and how strongly they are held.

A summary of the techniques that have been employed in attempting to measure racial prejudice shows a wide variety of techniques and approaches used by the researchers. For example, Clark and Clark (1947) utilized what has become known as the doll preference method whereby children were asked to match positive and negative characteristics to dolls representing black and white racial groupings. Stevenson and Stewart (1958) studied 3 to 7 year old age groups by using a doll assembly technique. By requiring

children to assemble dolls from racially mixed parts, racial identification and preference was measured. Other techniques include picture preference between paired pictures with black and white figures in response to positive and negative adjectives (Renninger & Williams, 1966); picture preference between pictures of classrooms with different racial compositions in response to questions about which class works the best, gets into more fights, would offer the most friends, etc. (Koslin, Amarel, & Ames, 1970); and the line-drawing technique (Clark & Clark, 1939). The latter method asked children to identify line drawings of black and white boys as themselves or as a relative or playmate. The children were also asked to color a line drawing "the color that you are." Finally, a study by Morland (1962) used a picture interview technique where the subjects were asked to identify photographs of black and white children and adults as most like "your father, your mother, and yourself."

The data collected from these various techniques are in agreement on two points: (a) Children as young as three and four respond differently to blacks than to whites and (b) both black and white children show preference for characteristics associated with whites. More recent in the area of racial attitudes has been the development of the Preschool Racial Attitude Measure II (Williams, Best, Boswell, Matson, & Graves, 1975). The Preschool Racial

Attitude Measure II (PRAM II) is a picture-adjective assessment in which a child picks between pictures of a light- and a dark-skinned figure in response to stories containing positive and negative adjectives. Using PRAM II, Williams et al. (1975) found that pro-white bias peaked at second grade and began to decline for white children.

Ballard and Keller (1976) criticized the Clark and Clark (1947) line-drawing technique, Stevenson and Stewart's (1958) doll assembly, and the Morland (1962) picture interview technique, among others, because statistical analysis revealed low correlations among the different techniques, suggesting that these techniques were not measuring the same construct. Ballard and Keller (1976) further criticized the forced-choice techniques described above because (a) the forced choices involved may not accurately represent the child's "identification" of or with a race and (b) reliability and validity coefficients will be affected when subjects are forced to choose between two equally unacceptable alternatives. Bringham (1971) has also criticized the use of forced-choice techniques for forcing the child to think in terms of generalizations and categories which tend to perpetuate the stereotype of white is good and black is bad. The same general criticisms can be leveled at the PRAM II (Williams et al., 1975). The approach of providing the child with the choice of either a picture of a light-skinned figure or a dark-skinned

figure, with no other choices, can be labeled a "forced choice" and thus vulnerable to the Ballard and Keller criticism.

Lerner and Buehrig (1975) assessed the development of racial attitudes in young children using an open-ended interview. The children were from a socially integrated school system and were 4, 5, 6, and 7 years of age. The data did not support previous research. Children in the open-ended interview did not show a tendency to describe stimuli with archtypical characteristics associated with each race. Lerner and Buehrig concluded that the subjects' responses were a function of the measurement technique. When subjects were allowed freedom in expressing their opinion, a full range of responses were given. But when subjects were forced to choose between two responses, their choices were the stereotypes.

If racial bias is held so strongly as to support the pro-white stereotype in most studies, then can this bias be modified? Best (1975) found operant conditioning techniques to be successful at modifying racial attitudes. She found that emphasis on curriculum and presence of a minority teacher were not effective. One of the questions of interest in the present study was whether integration meets one of its goals--that being to reduce or nullify racial bias. Researchers have found conflicting evidence on the effect of integration of schools. In an assessment

of racial attitudes, Crooks (1970) found that children attending an integrated preschool showed greater tolerance for blacks than did children with no preschool experience. Singer (1967) found that interracial contacts did improve racial relationships for fifth grade children. She measured social distance by using the Bogardus Social Distance Scale adapted for children. It consists of questions concerning the child's willingness to associate with children of other groups. The children from the integrated school put less distance between themselves and blacks than did those from segregated schools. Positive effects for integration were also found by Silverman and Shaw (1973) and Webster (1961), but only for black children. They did not find a reduction in the amount of prejudice for white children. Silverman and Shaw (1973) used a questionnaire with white and black high school students which included items on black-white interaction. Webster (1961) used the Social Distance Scale with white and black seventh graders.

Those studies which have found negative results for the effects of integration include Dentler and Elkins (1967) who found by using the Bogardus Social Distance Scale with third, fourth, fifth, and sixth grade children that the greatest social distance occurred in the generically integrated schools. Dentler and Elkins also administered the Racial Opinions Index for measuring pro-white or anti-black stereotyping. The integrated students displayed attitudes

more consistent with the stereotypes than did the segregated white students. The other studies in this category included Armor (1972) who found that blacks increased in black separatist ideology after integration, Green and Gerard (1974), and Stephan (1977). Green and Gerard had students select pictures of racial groups they would prefer to associate with. Stephan used a semantic differential scale with opposing adjectives such as good and bad to evaluate the amount of prejudice.

In his review of the literature, Stephan (1978) cited three studies which found no difference between segregated and integrated schools. These studies included Horowitz (1936) who used ratings of photographs of blacks and whites; Lombardi (1963) who administered an attitudes scale; and Williams, Best, and Boswell (1975) who examined the responses of children to PRAM I.

In his review of integration Stephan criticized the methods employed in the aforementioned studies. He said that the studies of desegregation that used the Bogardus Social Distance Scale were not directly comparable because the number and intimacy level of the questions on the Scale differ with the various authors. The same is true for those researchers who used the Semantic Differential Technique. Different items were used in the various research projects. In addition, this technique assumes the respondents agree about which end of the bipolar continuum is

positive.

The criticisms of the techniques and the inconsistency in past research on the effects of integration led to the present study's examination of projected personal space as a possible assessment of the development of racial attitudes and the influence of integration. Hall (1966) defined personal space as a series of spatial spheres or bubbles with the individual person as their center. These concentric circles or personal space zones are labeled the intimate (0 to 18 inches), the casual-personal (18 to 48 inches), the social-consultative (48 to 144 inches), and the public domain. Four interlocking variables determine the boundaries of these zones--culture, status, personality of the individuals involved, and their feelings toward each other. Personal space has been used as an effective technique in measuring other social attitudes. Researchers have used personal space to measure desired distances toward people of the same and opposite sex (Lerner, Karabenick, & Meisels, 1975; Lerner, Venning, & Knapp, 1975; Lomranz, Shapira, Choresch, & Gilat, 1975) and towards people of different body builds (Lerner, 1973; Lerner, Karabenick, & Meisels, 1975; Lerner, Venning, & Knapp, 1975) as well as to assess the developmental trends of social distance (Lerner, 1973; Lerner, Karabenick, & Meisels, 1975; Lerner, Venning, & Knapp, 1975; Meisels & Guardo, 1969). Lerner, Karabenick, and Meisels (1975) found the

developmental trend of social distance to increase with age among the kindergarten through third grade children that they studied. As the child grew older, he or she required more space. The studies done by Lerner and his various associates used a projective measure of personal space to assess the desired distances in varying situations as did Meisels and Guardo. But Meisels and Guardo in their study of third through tenth grade children found that less distance was needed as the child grew older. Lerner, Venning, and Knapp found no significant difference in the fourth, fifth, and sixth grade children they studied.

The present study examined the development of racial attitudes in both integrated and segregated schools through the use of projective personal space. Although contradictions exist in the literature, it was expected: (a) That children in segregated classrooms would indicate a clear preference for the white stimulus by using less distance towards it than towards the black stimulus. At the same time, the projected personal space of the children in integrated classrooms would reflect little or no difference in the distance used towards the black stimulus and the distance used toward the white stimulus and (b) that Lerner's findings that personal space increases with age would be replicated in both the integrated and segregated setting. Additionally, the purpose of this study was to examine the utility of personal space as an assessment tool.

The present study looked at how white boys in preschool and first and third grades would project personal space between a figure representing themselves and figures of a black boy and a white boy. The boys were randomly selected from integrated and segregated schools.

METHOD

Subjects

A total of 72 white boys, 24 from each of three age groups, participated in the study. The age groups were preschool (range = 3 years, 4 months to 4 years, 10 months; mean = 4 years, 1 month); first grade (range = 6 years, 6 months to 7 years, 6 months; mean = 6 years, 10 months); and third grade (range = 8 years, 4 months to 9 years, 6 months; mean = 8 years, 8 months). Twelve boys in each age group were selected from integrated classes within integrated schools and 12 from segregated classes within segregated schools. Each child had been in his respective classroom since the beginning of the school year, a minimum of 7.5 months. The schools were two integrated (65 to 75% white) and two segregated (95% white) elementary schools and two integrated and two segregated preschools located in San Bernardino County, California. (The percentages were based upon those considered to be integrated and segregated by Silverman and Shaw, 1973.) All the schools were considered to be of low socioeconomic status by their respective principals. The scores were analyzed for only the first 6 boys to participate from each of the selected grades in each of the integrated and segregated schools,

although all the boys who returned permission slips (45% of those distributed) were allowed to participate in the "game."

Materials

Flannel board figures manufactured by the Milton-Bradley Company (Human Body Parts) were used in this study as approach and object stimuli. The figures of black and white boys were used only as object stimuli. These figures were 40 cm high and were made out of cardboard with clothing and facial features printed on. Each figure came in several pieces. The pieces were put together and held by transparent tape so that assembly for each presentation would not be necessary. The black and white object stimuli were identical in every regard (size, hair style, features, and facial expression) except for skin color. The approach figure, which was used to represent the child participating, was also 40 cm high and made of cardboard. This figure was blue and had no features or clothing painted on. Four pictures of neutral stimuli were also used: A house, a teddy bear, a cat, and a tree. The instrument used for displaying the approach and object figures was a green flannel board (similar to that used by Lerner, 1973), 60 cm by 120 cm with 3/4 inch green ribbon stretched the full length of the board and placed 7 cm above the bottom of the flannel board. The ribbon was marked with horizontal

dashes 1 cm in length and 1 cm apart to indicate the distance between the approach and object figures. To facilitate measuring the distance, a small dot was marked at the end of every 10 cm.

Procedure

The children were tested individually in sessions less than 10 minutes in length, following a procedure similar to that utilized by Lerner (1973). During training the experimenter told each boy, "We are going to pretend that this (the blue figure) is you. See how it sticks to the board? Now, you do it." The figure was removed and the child was given a chance to try. The researcher then placed a picture of a neutral stimulus (house) on the right hand side of the flannel board. The boy was told they were going to play a game called "Coming close to things." The researcher would say, "Show me how close you would like to be to the house." Each trial began with the blue figure removed from the board. The child was asked to follow the same procedure with a second neutral stimulus (teddy bear). During the testing with the black and white figures, the child was told by the researcher, "Here is a picture of a boy your age. Where would you like to be?" The child then indicated by placing the figure, how close he would like to be to the boy (Trial 1). The researcher recorded the distance in centimeters between the foot of the object

figure and the nearer foot of the approach figure. Presentation of the black and white stimulus was counterbalanced by the researcher. A third neutral stimulus (cat) was presented and then the black and white stimuli were presented again in reverse order to check response reliability (Trial 2). The session ended with the presentation of the fourth neutral stimulus (tree).

RESULTS

The distances, in centimeters, utilized between the object stimulus and the approach figure were analyzed in a variance of analysis by type of school the subject attended (integrated or segregated), age of subject, color of stimulus, and order (Trial 1 and Trial 2). Type of school and age were between subject factors. Color of stimulus and order were within subject factors. The results of this analysis are shown in Table 1.

As indicated in Table 1, white boys placed greater distance between the approach figure and the black object figure than between the approach figure and the white object figure across both integrated and segregated schools ($F = 5.17$, $df = 1/66$, $p < .05$). Additionally, the analysis demonstrated that age had a significant effect on the amount of distance utilized by the boys ($F = 3.24$, $df = 2/66$, $p < .05$). Figure 1 illustrates these two main effects.

As shown in Figure 1, the magnitude of the distance used varied significantly with the ages of the boys. Duncan's post hoc test indicated a significant difference between preschool boys and first grade boys and between preschool boys and third grade boys in the amount of distance used ($R_3 = 6.64$, $df = 66$, $p < .05$). The

Table 1
Analysis of Variance

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Type of School (I)	168.06	1	168.06	0.35
Grade (G)	3107.80	2	1553.90	3.24*
Order (T)	68.06	1	68.06	0.72
Stimulus (S)	561.13	1	561.13	5.17*
I x G	335.76	2	167.88	0.35
I x T	320.89	1	320.89	3.41
G x T	36.55	2	18.27	0.19
I x S	42.01	1	42.01	0.39
G x S	40.27	2	20.14	0.19
T x S	91.13	1	91.13	1.15
I x G x T	459.51	2	229.75	2.44
I x G x S	193.17	2	96.59	0.89
I x T x S	0.68	1	0.68	0.01
G x T x S	144.02	2	72.01	0.91
I x G x T x S	110.59	2	55.30	0.70
Subj. w. grps.	31610.50	66	478.95	
(S) x subj. w. grps.	7165.92		108.57	
(T) x subj. w. grps.	6217.50	66	94.20	
(ST) x subj. w. grps.	5247.08	66	79.50	

*p < .05.

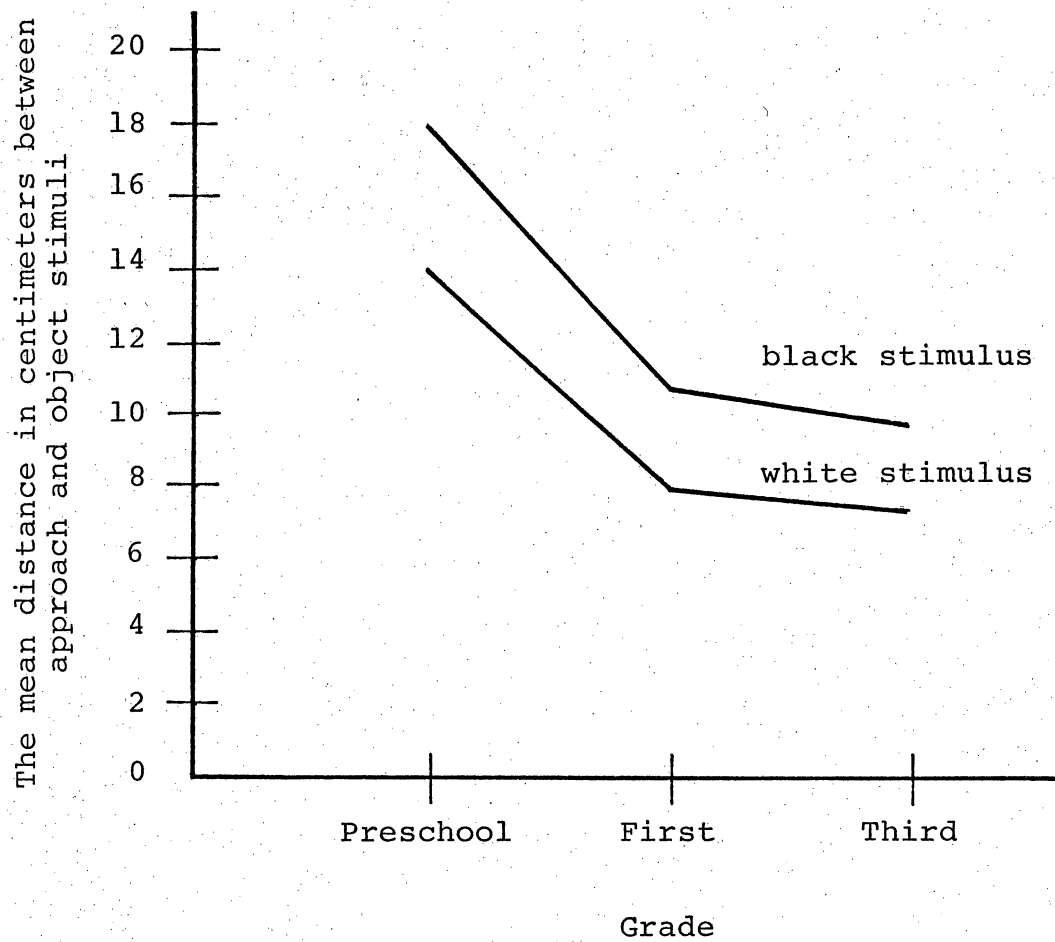


Figure 1

The mean distances maintained between black and white stimuli across three age groups

preschoolers utilized the greatest distances between the approach figure and both of the object stimuli. There was no significant difference across color of object stimuli between the performance of first grade boys and third grade boys.

The study indicated that type of school--integrated versus segregated--produced no significant effect. Table 2 indicates that white boys across all three age groups in both integrated and segregated schools tended to utilize more personal space when approaching the black object figure than they did when approaching the white object figure.

Table 2
 Mean Distance in cm Utilized by White Boys Towards
 Black and White Stimuli in Integrated
 and Segregated Schools

School	Grade		
	Preschool	First	Third
Integrated			
Black	15.54	12.29	11.04
White	14.58	8.63	9.58
Segregated			
Black	19.92	8.25	8.41
White	13.25	6.88	5.79

DISCUSSION

The data indicated a significant effect for color of the stimulus figure as white boys, across all three age groups, used greater projective personal space when approaching a black stimulus than when approaching a white stimulus. This finding is in line with the previous research on race recognition and preference in that:

(a) The boys as young as 3 and 4 responded differently to the black stimulus than to the white stimulus and (b) boys of all three age groups showed a definite preference to be closer to the white stimulus figure. Williams et al. (1975), using the PRAM II, discovered that, in the case of white children, pro-white bias peaked at the second grade and then began to decline. This phenomenon was not duplicated in the present study. The analysis showed no significant difference in the distance used by first graders and that used by third graders.

No significant differences were found between boys from integrated and segregated schools. The research in this area had been reported as conflicting, Singer (1967) and Crooks (1970) having found support that integration does lessen the distance between races. Other researchers (Dentler & Elkins, 1967) found that race relations were very poor in the schools that were naturally integrated.

The present study supported the previous findings of Horowitz (1936), Lombardi (1963), and Williams, Best, and Boswell (1975) who as reported by Stephan (1978) found no effects for integration on prejudice. In the present study the number of black children in the classroom did not appear to be a significant factor as boys from both integrated and segregated schools performed similarly. The length of time (minimum of 7.5 months in this study) the boys had been in integrated classes may be a factor, but the fact that the results were so similar suggests that this is not the case or at least this period of time was not long enough to cause a change in attitude.

The main effect for grade was significant. This study, designed after Lerner (1973), found that preschool boys used the greatest distances in comparison with either first or third grade boys. This did not replicate Lerner's findings that older children used the greatest distances. The present study had the added dimension of race, but the decline in distance with increasing age was true across both race of stimuli and across both integrated and segregated schools. The findings of the current study do support the results of Meisels and Guardo (1969) that the distance utilized decreases with age, although the present study used a younger population than did Meisels and Guardo.

In view of the original hypotheses the present study suggests: (a) That integration does not appear to decrease

the amount of racial bias in young white boys and (b) that personal space decreases with age. Personal space appears to be an alternative assessment tool for the development of racial attitudes, as the results in this study were similar to those found in previous research on racial bias. Additionally, the use of the personal space measure was not a forced-choice technique such as those methods used by Crooks (1970), Stevenson and Stewart (1958), Clark and Clark (1939), and Morland (1962). In this study the boys were not limited to two or three alternatives choices. They had a range of choices as to how close they wanted to place the approach figure to the stimuli.

Further research is needed on the effects of integration. Is the money and effort spent on integration achieving its goals? Further research should pursue the possibilities of modifying racial attitudes and exploring why the literature shows so much disagreement as to the success of integration. The present study examined a limited population and thus cannot address the question of performance differences between sexes and the influence of integration on the minority groups. Expansion of the study into these areas should prove informative.

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