This pilot study sought to determine what were the effects, if any, of having integrated and all-white kindergarten children view specially prepared video-taped television sequences. These sequences featured black and white children who were unknown to the viewers and who portrayed roles in which they demonstrated simple concepts. Data from this preliminary study (N=59) indicated that: (1) both types of kindergartners can acquire concepts (over, around, through, etc.) by passively viewing either an unknown, same or opposite color child teaching, (2) viewing an unknown child-teacher of the opposite color did not alter the initial same color preferences of "preferred companions" of either type of kindergartner, and (3) high concept attainers did not demonstrate more pre-post change to opposite color child-teachers as "preferred companions" than low concept attainers. Recommendations for further research are given. (Author/NH)
"Effects of Viewing Videotaped Same and Opposite Color Child-Teachers on Integrated and All-White Kindergarteners"

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Background and Purpose of the Study

Two problems of current significance served as the basis for the investigation reported here. The first is an issue which probes the appropriateness and effectiveness of using the medium of television to achieve some basic cognitive goals in kindergarten education. The second involves finding "workable" socialization experiences for young black and white children entering school.

It has been suggested that the kindergarten year should provide a broad base of experience drawn from many different samplings of knowledge, skills and appreciations.1 By the same token, direct, formal instruction is not usually introduced in nursery school and kindergarten.2 How, then can kindergarten children be introduced to learning some basic cognitive skills such as relational concepts like, "over", "under", "around", and "through"? Because of their short attention spans, a way had to be found that would capture and hold children's attention. Television has partially accomplished this difficult task. The extensive exposure that young children have had to the medium of television before entering school has made it a logical choice for continued utilization after schooling has begun.

Education has generally been expected to provide solutions to the other problem mentioned, that of providing "workable" socialization experiences. An obvious technique directed to this problem has been integration of the schools. We did not propose to take on the momentus task of trying to answer the question, "Is integration working?"
However, since kindergarten may be the first place where different colored children have any recurrent contacts in a social setting, it seemed appropriate that this should be a place where wholesome interaction between children should be encouraged. Hartup has said, "... the development of equalitarian attitudes should be one focus of the curriculum in any program for young children."³

The idea to conduct research involving these two problems came in the summer of 1969 after seeing a pilot film of 'Sesame Street', which was then a new educational television series to be shown that fall. It was obvious that the producers of the film were trying to accomplish two objectives simultaneously. By having black and white youngsters who were involved in a game of "follow the leader" demonstrate examples and non-examples of such concepts as "over", "under", "around", etc., they intended that the viewers would passively acquire these concepts. In addition, by having black children and white children play both "leadership" and "dunce" roles, an attempt was being made to portray to a nation of children that may not have had any experience with different colored children that any differences they saw were only superficial.

The question then became could a film or video-tape be used successfully as a vehicle to help alleviate serious social problems created when children lack "experience" with children of a different color? Therefore, it was the purpose of this study to obtain pilot data that would supply partial answers to the following questions:

1. Can kindergarten children acquire concepts by passively viewing video-taped television sequences in which other children are demonstrating the concepts?
2. What are the social preferences of children attending an integrated and an all-white kindergarten as determined by their selection patterns of pictures of children previously unknown to them?

3. Can these social preferences be changed by passively viewing video-taped sequences depicting different colored children in "leadership" roles?

So it was our purpose to observe the multiple effects upon kindergarten children of seeing concepts demonstrated by other children in videotaped sequences: one, the degree of concept attainment, and two, possible changes in the vicarious social preferences of children from both integrated and all-white kindergartens.

Procedure

An integrated and an all-white kindergarten class from a large city in Michigan were selected for the study. At the time the research was conducted, Spring, 1970, an all-black kindergarten class was unavailable. Children from each kindergarten class were randomly assigned to view one of two different video-taped television sequences. The video-tapes were locally produced but in another city so that the "actors" would be unknown to the intended audience. One version of the video-tapes depicted a black fourth grade boy "teaching" other black and white classmates a series of sixteen concepts appropriate for the kindergarten viewers. (For example, "over", "under", "around", etc.) A similar version was produced with a white child as "teacher". Each "treatment" group was shown progressive segments of their sequence over a four-day period.

An instrument was devised and piloted (test/retest reliability, r=.84) which doubly checked each of the sixteen concepts and also required the
children to mark pictures of "preferred companions", the pictures being of the youngsters appearing in the video-taped sequences. The concept and social choice items were interspersed and picture placements shuffled to counter against any "choosing" set. To obtain base line data a pre-test was administered thirty days before the children viewed the video-tapes.

Findings and Conclusions

The findings of the study, which parallel the questions previously asked, were:

1. A significant number of concepts (p.<.05) were acquired by both the integrated and all-white children after viewing the video-taped demonstrations.

2. Initially, both the integrated and the all-white children chose more "preferred companions" of their color than they did of an opposite color. (p.<.01).

3. The passive viewing of video-taped sequences depicting different colored children in "leadership" or "teaching" roles did not result in a significantly greater number of choices of "preferred companion" of a different color in either the integrated or the all-white class.

So actually, two messages were sent to kindergarten children at the same time. One message, designed to help children attain concepts, was carefully planned and got partially through. The children were most successful in attaining the concepts of triangle, pentagon, over, around, through, curved, slanted and pointed. Some of the concepts were already known by most of the children. These were: circle, rectangle, under, up, down and flat. The demonstrations were unsuccessful in helping the
children to attain the concepts of left and right.

The children seemed to have an easier time in attaining those concepts shown in the video-tapes which had obvious criterial attributes. For example, in the case of triangle, pentagon, curved, slanted and pointed, the "teacher" in the video-tapes had been able to hold up an appropriate poster for each concept and emphasize the criterial attributes contained in that particular concept. However, in the case of the concepts left and right, which the children were unable to attain, the lack of identifiable attributes or at least a consistent referent left the children confused and therefore unable to identify examples and non-examples of the concepts. Perhaps the biggest difficulty with the concepts of left and right was that the children for the most part were unable to make the necessary visual reversal to correctly identify a left or a right hand unless they viewed the demonstrator facing the same way as themselves. It is recommended that in further attempts to teach the concepts left and right, or for that matter any appropriate concepts, that the following techniques be used: 1) increased repetition, especially with concepts similar to left and right where responses are mostly dependent upon conditioning through practice; 2) audience involvement, so that rather than passively viewing an activity the children can participate and therefore practice responding; and, 3) additional opportunities for the viewers to see the children in the video-tapes being tested with a variety of different examples of the concepts in question.

The other message, the one where different colored children were portraying roles, did not get through to its intended audience of kindergarteners. In other words, just substituting different colored children in the "design" of the video-taped sequences wasn't enough for the viewing children,
either integrated or all-white kindergarteners, to change their initial social preferences. Failure of this message to have an effect suggests a need for as powerful a theory for changing affective behavior as there is for changing cognitive behavior. It appears that more theoretical positions should be employed in "affective design" than just changing the color of participants. Some of the possible alternatives resemble techniques that could be used to increase cognitive performance and therefore could still be used in simultaneous fashion as with video-taped presentations. For example, one use of repetition could be employed by increasing the number of times the viewers see some of the different segments of the video-tapes. Two, viewers could be encouraged to actively respond during the showings thus creating an atmosphere of involvement rather than just the quiet attentiveness they exhibited in the present study. Three, the children watching the video-tapes could become further involved by being allowed to actually choose from the television screen the "leader" they wanted to see so that they would really be modeling his behavior on the basis of their own preference. Other class members might then want to play roles of the leader's companions and thus allow the whole scene shown on the video-tapes to be modeled and perhaps even generalized to new situations and experiences in viewing children's classrooms.

In attempting to analyze why both of the messages in this study did not get through, there is the possibility that regardless of how powerfully the affective message is "designed" that kindergarteners can only "receive" one message at a time. Perhaps social messages should not be complicated by adding cognitive messages—or vice versa. Obviously, this problem needs to be investigated and forms an interesting basis for addi-
Some crucial questions arise as a result of the findings of lack of differences between the social preferences of the integrated and all-white kindergarteners in this study. Have children already become solidified in their social preferences before they reach kindergarten? Is it possible that the populations used in the present study were biased? Replications of the present study with modifications need to be conducted to help obtain answers to these questions. Specific recommendations for this research are included at the close of the paper.

The findings shown by the ranking of the stimulus questions used in conjunction with the social preference instrument used in the study reveal an interesting pattern. The question which resulted in the greatest number of opposite color choices was, "If you could pick one of these boys to be on a television program, which one would you choose?" Perhaps the children were thinking, "Yes, I'll choose this boy for that experience--he will be entertaining and certainly not a threat." The choice of someone to be on a television program removes that person from the child's immediate environment. In contrast, the question which elicited the least number of opposite color choices was, "If you could live next door to one of these boys, which one would you choose?" Of the eight stimulus questions used, this one suggested the social relationship with the greatest potential for sustained involvement with someone of another color. The television question suggested the least amount of social involvement or "closeness" to an opposite color child. The other six stimulus questions tended to bunch toward the middle of the ranking although the question, "If you could write letters and mail them like the big kids do, which of these boys would you like to write?" pro-
duced a low ranking as to the number of opposite color choices it yielded. Even though writing to someone might not involve personal contact, the children hesitated to choose to write to someone of another color.

It is possible that through continued exploration of social preferences by the use of additional and varied stimulus questions similar to the ones used in the present study that we might discover activities, both in school and out, which would encourage more amiable relationships between children of different colors. Again, this question can only be resolved by continued research.

Recommendations for Further Research

The findings from this pilot study did not produce evidence that the approach of seeking task oriented behavior and social learning simultaneously were successful with these kindergarten populations. However, because this was a pilot study, necessarily limited in scope, and because the findings revealed modifications that could be made in the overall design of the study, it is suggested that the following recommendations be considered pursuant to further research:

1) Replications of the study should be done with other kindergarten classes and particularly with integrated classes containing a larger percentage of black students than in the present study.

2) Replications of the study should be done which include some all black kindergarten classes.

3) Replications of the study should be conducted in various grade levels of elementary schools as well as in some pre-kindergarten nursery schools to determine when "integratedness" begins to have an effect.

4) Replications of the study should be done in areas where both schools
and neighborhoods are integrated versus areas where only the schools are integrated.

5) Replications of the study should continue to probe the question of whether cognitively brighter children are more able to pick up both the cognitive and affective messages or whether they are concentrating so intently upon the cognitive message that they cannot "receive" the affective one.

6) Several modifications of the present study need to be made to include: (a) provisions so that the children who play the role of "leader" in the video-tapes will be those children who were chosen for the part by the kindergarten viewers so that those viewers might then be able to exhibit true modeling behavior; (b) revising the video-tapes so that the "leader's" companions offer the "leader" more visible and vocal support and encouragement for the viewers to see; (c) the spacing out of the video-tapes over a longer period of time. (Instead of having four segments shown on successive days as in the present study it might be better to show one segment a week for four weeks); (d) having the children actively participate as they view the video-tapes by responding and practicing the concepts being demonstrated; (e) giving the children the pre-test immediately following the showing of the last day's video-tape instead of waiting until the following day as in the present study; (f) provisions for obtaining the impressions, comments and personal views of the children as to the social preferences they show.
