Interpersonal responses to stigma as a function of age.

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INTERPERSONAL RESPONSES TO STIGMA
AS A FUNCTION OF AGE

A dissertation Presented
By
Robert Isaac Fischer

Submitted to the Graduate School of the
University of Massachusetts in
partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY
October 1970
Major Subject: Clinical Psychology
INTERPERSONAL RESPONSES TO STIGMA
AS A FUNCTION OF AGE

A Dissertation
By
Robert Fischer

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September, 1970
I wish to thank the members of my dissertation committee, Professors Cass Turner and Sy Berger, for their cooperation and to give special thanks to the chairman of my committee, Professor Sheldon Cashdan, without whose guidance, understanding, and encouragement this research might never have been undertaken. I also wish to express my gratitude to Mr. Lawrence Root, the principal of Council Rock School in Rochester, New York, for his complete cooperation. In addition, I would like to thank the seven first and fourth grade teachers at Council Rock who were so patient about allowing their students to participate in this research. Last, but not least, I am unable to express how very much I owe to my wife, Margaret, not only for her participation as a research assistant in the investigation, but also for her unyielding emotional support and encouragement during the crises of conducting the research and writing the dissertation.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
</tr>
<tr>
<td>Theory</td>
</tr>
<tr>
<td>Research</td>
</tr>
<tr>
<td>METHOD</td>
</tr>
<tr>
<td>Subjects</td>
</tr>
<tr>
<td>Apparatus</td>
</tr>
<tr>
<td>Procedure</td>
</tr>
<tr>
<td>RESULTS</td>
</tr>
<tr>
<td>DISCUSSION</td>
</tr>
<tr>
<td>Further Avenues of Research</td>
</tr>
<tr>
<td>APPENDIX</td>
</tr>
<tr>
<td>REFERENCES</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Analysis of Variance of Train</td>
<td>24</td>
</tr>
<tr>
<td>Playing Time Allotted to the Imaginary Subject</td>
<td></td>
</tr>
<tr>
<td>2. Analysis of Variance of Train</td>
<td>27</td>
</tr>
<tr>
<td>Playing Time Allotted to the Imaginary Subject by Fourth Graders</td>
<td></td>
</tr>
<tr>
<td>3. Duncan's New Multiple Range Test of the Fourth Grade Means</td>
<td>29</td>
</tr>
<tr>
<td>(in seconds)</td>
<td></td>
</tr>
<tr>
<td>4. T-Tests Comparing the First and Fourth Grade Means at Each Level</td>
<td>30</td>
</tr>
<tr>
<td>(Category)</td>
<td></td>
</tr>
</tbody>
</table>
ILLUSTRATION

Figure 1. First and Fourth Grade Means for the Four Types of Stigma . . . . 26
Introduction

Every individual lives in a world of social encounters, a world in which face to face contact with other human beings is unavoidable. When two people meet for the first time to begin a relationship, a situation arises in which an infinite number of possible outcomes can result. Two people can relate together in ways which range from shouting obscenities at one another, to ignoring one another, to developing an intimate sexual relationship with one another. The unlimited possibilities of human relationships make the initial interpersonal encounter a very special, and potentially very anxiety provoking situation. Both participants of such an encounter, if previously unacquainted with one another, will be seeking to acquire information about the other person. Typically this information will come from cues such as physical appearance, socio-economic status, and personality variables like the person's seeming trustworthiness, or his sense of humor. These initial interpersonal cues, or first impressions, allow the participants in the encounter to use their previous experience with people similar to the one before them, or to use cultural stereotypes, in making judgments about one another. In this way, the interpersonal rules of the particular situation or, the expectations
each member of the relationship will have about the other member, are established. These expectations, then, result from what Goffman (1963) calls "the social identity" of the two participants.

Some of the cues which help to define an individual's social identity are very apparent; that is, they are readily available and are frequently sought by others. Social information conveyed by such cues sometimes establishes a special claim to prestige for one individual such that he becomes the possessor of a positively valued position or status in the eyes of others. Such cues are popularly called "status symbols." Some likely examples of status symbols in white middle class society might include things like the proper usage of the English language, the possession of fine clothes, a "good" address, and acquaintances with influential and powerful people. In contrast to these so-called status symbols are what Goffman (1963) calls "stigma symbols," namely, certain attributes an individual may possess any one of which will generally cast him in an unfavorable, discreditable position vis-à-vis others. He characterizes people with any of these attributes as possessors of a stigma in that they are perceived by persons not sharing the attribute (normals) as possessing a failing, a shortcoming, or a handicap of one sort or another.
Theory. In his 1963 work on the subject entitled *Stigma*, Goffman delineates three broad categories of stigmata. First, there are what he calls "the abominations of the body" which refer to various physical handicaps or deformities. The second category contains the so-called "blemishes of individual character" of which previous mental illness, homosexuality, alcoholism, and imprisonment are examples. Goffman refers to the third category as the "tribal stigma of race, nation, and religion." This category encompasses those racial and ethnic characteristics which often receive negatively valued prejudicial reactions.

Goffman (1963) places the concept of stigma in an interpersonal context emphasizing the relationship between normals and the stigmatized. He characterizes these relations as uneasy and anxiety provoking, with normals thinking of the stigmatized as "not quite human." For example, were we to observe a normal individual interacting with an ex-mental patient for the first time, we would expect the interaction to be characterized by uncertainty and tension for both participants. The stigma, in this case the ex-mental patient status, therefore influences the kinds of interpersonal behaviors likely to occur in the interaction. As just one likely outcome, there would probably be a mutual concern over saying and doing the "right" things. Perhaps even more
to the point is that people who eventually get psychiatric care and attention first come to the attention of their lay acquaintances (Goffman, 1967). The behaviors that psychiatrists eventually diagnose as mental illness are those that the public has already categorized as socially offensive behavior. That behavior, more likely than not, has been received by normals with scorn, hostility, and social sanctions.

Sociological evidence (Lefton, Skipper, and McCaghy, 1968) tends to corroborate Goffman's notion that society in general, and normal individuals in particular, respond to stigmatized individuals differently than they do to normals. In other words, people respond with certain stereotyped attitudes and interpersonal behaviors which, in part, represent attempts to decrease the anxiety arising from the social interaction.

One may ask how it comes to pass that normal individuals respond to stigmatized individuals differently than they do to other normals. Goffman (1963) states, "The attitudes we normals have toward a person with a stigma, and the actions we take in regard to him are well known since these responses are what benevolent social action is designed to soften and ameliorate." This statement assumes a tendency to respond in negative or hostile ways toward the stigmatized which society then combats through "benevolent social action."

This basic assumption is echoed by Farina, Holland, and
Ring (1966) who state, "When we perceive another individual to be a cripple, mentally ill, or a beggar, most of us feel dislike and aversion toward him. However, perhaps because we learn from early childhood that we should help and be sympathetic to those less fortunate than ourselves, few of us feel only repugnance and contempt. At times we certainly feel sympathy and behave in a supportive manner." Thus Farina et al. (1966) posit, as does Goffman, the initial existence of negative, hostile responses in normals toward the stigmatized. It is only through the process of acculturation that normals learn to respond positively and supportively to the stigmatized ("those less fortunate than ourselves").

This introduction of early childhood learning as a factor in the development of supportive stereotyped responses toward the stigmatized raises several questions. The first one has to do with whether the hypothetical initial hostile responses in normals are also learned. That is, do young children respond in stereotypic ways, either hostilely or supportively, to those who are stigmatized? Or, do they not differentiate between normals and stigmatized in terms of their interpersonal responses until they reach a certain age? Phrased differently, at what age do children start exhibiting stereotypic responses to the stigmatized? Another question has to do with the specific nature of stereotyped responses toward
different types of stigmata. This question asks, do
different stereotyped responses, either hostile or
supportive develop toward different types of stigma?
These are the questions toward which the present in-
vestigation addresses itself.

In the present investigation an attempt is made
to observe the responses of different aged, normal chil-
dren as they interact with another normal child, a
physically handicapped child, a black child, and an emo-
tionally disturbed child. Thus, the experimental design
of the study encompasses representative instances of
all three categories of stigmata. The experimental
paradigm chosen to observe the occurrence of stereotyped
responses, either hostile or supportive, is an inter-
personal game-sharing situation. Of particular interest
in the study is whether children of different ages react
differently as a function of the type of stigma possessed
by a peer with whom they must share a game.

Research. In recent years, a body of empirical
research dealing with the above phenomena has been
steadily developing. Cohen and Struening (1962) inves-
tigated the attitudes of people working with psychiatric
patients toward the mentally ill. They found the exist-
ence of two basic negative attitudes. One attitude
stressed the differentness and inferiority of the
mentally ill in comparison to normals. The second basic
attitude reflected a desire to place strong social restrictions on the mentally ill both during and after hospitalization.

Ellsworth (1965), in a similar study, also found two basic attitudinal positions of mental health personnel toward the mentally ill. The first he called a "restrictive" attitude and the second he called an attitude of "protective benevolence." The former was found to be related to controlling and restrictive behavior toward the patients on the part of those personnel possessing the attitude. The latter was found to be related to "aloofness, distance, and dishonesty" toward the patients.

Farina and Ring (1965) found that the perception of a person as mentally ill strongly influenced how he was responded to by others. Furthermore, this seemed to be true despite the fact that the stigmatized person's behavior did not justify negative interpersonal responses. Using a cooperative task, they found that subjects preferred to work alone when a co-worker was viewed as mentally ill. In addition, subjects also blamed the co-worker for perceived inadequacies in their joint performance; this in spite of the fact that the perception of the co-worker as mentally ill led to significantly better performance on the cooperative task.
The authors posited two hypotheses for this latter finding: (1) working with a stigmatized person elicited less fear of failure, thus decreasing anxiety and increasing task performance; (2) the better task performance was a function of a compensation for perceived inadequacies in the co-worker. A more positive hypothesis, unexplored by the authors, is that those subjects who had to cooperate with someone perceived as mentally ill adopted a helping, supportive orientation to the task which in turn facilitated performance.

In another study using mental illness as the stigma, Farina, Holland, and Ring (1966) found that normal subjects used longer durations of shock in attempting to teach a task to a supposedly mentally ill person than in teaching the task to a supposedly normal person. The degree to which the mentally ill person was held responsible for his stigma was directly related to the amount of pain inflicted upon him.

The vast literature of the research dealing with prejudicial reactions toward racial and ethnic groups is, for the most part, too tangential to be considered here. Of particular relevance to the present investigation, however, are several studies dealing with the development of racial prejudice in early childhood. Goodman (1952) found that by age four middle class children
are able to begin making rational comparisons and to attach values to the differences they perceive. Thus at four years of age most middle class children can pre-judge an individual on the basis of his membership in a group, especially a racial group. More specifically, Goodman (1952) concluded that negatively valued stereotypes of blacks begin to be absorbed in early childhood.

Taylor (1966) used photographs of white and black children and asked white subjects to rank order them in terms of preferred companions and preferred play situations. His subjects were first graders and fourth graders and he found that, in general, children between the ages of six and ten possess negatively valued stereotypes of blacks. Furthermore, he found that intelligence was not related to stereotyping and when the effects of socio-economic status and intellectual ability were controlled for, the older children were more likely to possess the negatively valued stereotype of blacks.

Several studies dealing with physical disability as a stigma also support Coffman's contention that normals respond to stigmatized individuals in unique, stereotyped ways. Kleck (1968) reports a series of experiments designed to study face to face interactions in which one of the participants (a confederate of the
experimenter) is physically disabled (in a wheelchair). In the first experiment, the arousal state (measured by GSR) of subjects interacting with the confederate playing the disabled role was found to be significantly greater than that of subjects interacting with the same confederate playing the "normal" role. It was also found that subjects interacting with the disabled individual terminated the interaction significantly sooner. Further, these subjects gave fewer responses to questions posed by the confederate and they distorted the responses they did give to agree with the opinions they thought would characterize physically disabled people.

A second study was designed to determine the attitudes subjects formed toward the stigmatized individuals with whom they had interacted. Kleck (1968) reports, in contrast to the findings on attitudes toward the mentally ill, that the subjects saw the physically disabled confederate as being friendlier and more intelligent; in general, they evaluated him more positively than subjects interacting with the same confederates when they were able-bodied.

Farina, Sherman, and Allen (1968) also investigated the effect of physical disability in a learning via punishment paradigm. They found that subjects used
shorter durations of shocks in teaching a task to a severely crippled person (an amputee in a wheelchair) than in teaching the task to a slightly crippled person. The authors concluded that in addition to stigmata evoking contempt, ill treatment, and avoidance responses, they also evoke responses of sympathy and aid to those "less fortunate than ourselves," the latter having been learned through the process of acculturation.

This conclusion, then, brings us back to the primary questions asked in the present investigation; namely, at what age do children start exhibiting stereotypic responses to the stigmatized? And, do different stereotyped responses, either hostile or supportive, develop toward people who are stigmatized in different ways?

As mentioned earlier, the experimental paradigm chosen to observe the occurrence of stereotyped stigma responses is an interpersonal game-sharing situation. Each subject thinks he will be sharing an electric train set-up with either a normal boy, a black boy, a physically handicapped boy, or an emotionally disturbed boy, all the same age as the subjects. These stigmatized children, including the so-called normal boy (a control group), are not actually present in the experimental situation and, henceforth, shall be referred to as the
imaginary subjects.

Before continuing, a word needs to be said about the concept of a so-called normal boy. This concept is a rather nebulous one, very much dependent upon the given situational frame of reference for its definition. Goffman (1963) characterizes the normal male in America as "a young, married, white, urban, northern, heterosexual, Protestant father of college education, fully employed, of good complexion, weight and height." Transposing these characteristics to those of a normal boy between the ages of six and ten, for present purposes, results in defining such a boy as white, healthy-looking, of average height and weight, and dressed in middle class school clothes.

The experimental subjects, first and fourth grade boys, have complete control over who plays with the electric trains, either themselves or the imaginary subject, and for what percentage of time. This type of behavioral situation allows for the occurrence and measurement of both hostile (selfish monopolization of the train) and supportive (being generous and self-sacrificing with the train) responses. The subjects' response to the normal imaginary subject will provide a baseline measure of the rate of sharing for the two age groups. On half of the train sharing trials the
subject will start playing with the trains and will have to give them up in order to let the imaginary subject play with them. On the other half of the trials the imaginary subject will start with the trains and the subject will have to take the trains away in order to play with them himself. Because of Doland and Adelberg's (1967) finding that sharing behavior increased drastically with social reinforcement from the experimenter, excessive cautions are taken in the present investigation to eliminate such a possibility.

There are two major hypotheses in the present investigation. The first hypothesis is that the first grade subjects will not share any differently as a function of the kind of child (normal, black, physically handicapped, or emotionally disturbed) they are sharing with. This hypothesis assumes then that both hostile and supportive stereotyped responses toward those who are stigmatized are learned, and furthermore, that a child in the first grade has not yet had enough exposure to cultural expectations to assimilate these responses. Thus, it is assumed that although the first graders will be able to differentiate cognitively between the presence or absence of stigmata as well as the different types of stigmata, they will not yet have learned to respond differently to those possessing stigmata. The second
hypothesis is that the fourth grade subjects, having had more of an opportunity to learn stereotyped responses toward those who are stigmatized, will share for either greater (supportive response) or lesser (hostile response) amounts of time with the stigmatized children than they will with the normal child. On the basis of the findings of Goodman (1952) and Taylor (1966) a specific directional hypothesis is that the fourth grade subjects will make hostile responses toward the black child; that is, they will not allow the black child to use the electric trains as much of the time as they allow the normal child. The paucity of previous research on the behavior and attitudes of young children toward the stigmata of mental illness and physical handicaps precludes the statement of directional hypotheses regarding the nature of the stereotyped sharing responses fourth graders will make to these types of stigmata.

In addition to the two major hypotheses, there are two secondary hypotheses. Handlon and Gross (1959) found that sharing behavior in general increased with age from pre-school children to children in the sixth grade. Thus, one secondary hypothesis is that the fourth graders will share a significantly greater percentage of the train playing time than will the first
graders across all categories of stigmata. The other secondary hypothesis is that children will share a significantly smaller percentage of train playing time on those trials when they start playing with the trains and have to give them up than on those trials when the imaginary subject starts and they must take the trains away in order to play with them. This hypothesis is based on the assumption that it is easier to keep something you already have than it is to take away something someone else has.

Method

Subjects. Eighty male grade school children, all of whom were white, were subjects in the study. Subjects were chosen randomly, forty from the first grade classes at a suburban, middle and upper middle class public school and forty from the fourth grade classes at the same school. The first graders ranged in age from 6.6 years to 7.8 years and the fourth graders from 9.5 years to 10.5 years at the time of the study. The school itself, grades Kindergarten through four, contained 600 students of which twenty-one were black children bussed from the inner city of Rochester, New York, under the sponsorship of an urban-suburban Title III
E.S.E.A. project and by agreement of the Brighton Board of Education and the Rochester City School District. Of the 600 students in the school only twelve were black children residing in the school district. Nonetheless, all seven first and fourth grade classes from which the subjects were chosen contained at least one black child.

**Apparatus.** Two Aurora Postage Stamp N-gauge electric trains, Model No. 4701 "Fast Freight," were used in the study. A schematic representation of the train set-up can be seen in the Appendix. The two identical sets of tracks and trains were placed in separate but juxtaposed 8' x 8' rooms. Room B, the room in which a research assistant was recording the data, contained, in addition to a train set-up, a Sony Tape Recorder, Model No. TC 200. Room A, the room in which the subject played with one of the train set-ups, also contained an electrical switch and a GraLab Model 300 Darkroom Timer. (A pictorial representation of Room A can be seen in the Appendix.) The timer was plugged into the wall outlet and the electrical switch was plugged into the "enlarger outlet" of the timer so that the entire electrical system was activated only when the timer was going. The train set-up in Room A was plugged into the electrical switch so that when the
switch was up and the timer was going the trains in Room A were operational. When the switch was down, it activated the tape recorder in Room B, which then played a recording of the sounds of someone playing with the trains. A schematic representation of the wiring can also be seen in the Appendix. A Polaroid Color Pack II camera and black and white film were also used in the study.

Procedure. Each subject was picked up from his classroom by a female research assistant (the wife of the experimenter) and brought to the experimental rooms. On the way she informed each subject that he would be playing with some electric trains and that another boy would be playing with another set of trains at the same time in the next room. The subject was first shown Room B with its train set-up and was told that the other boy was going to be playing with those trains. The subject was then brought into Room A and introduced to the experimenter. The female assistant then left stating that she was going to pick up the other boy. She returned to Room B alone several minutes later. The subject, meanwhile, was seated in front of a table upon which the electric train tracks were set up. He was shown exactly how the trains worked. After approximately thirty seconds of playing with the trains, this primarily to check out whether or not the subject
had understood how the trains worked, the trains were shut off and the subject was asked to stand over by the door so that his picture could be taken. Immediately after his picture was taken, the experimenter said that he was going to go into the next room (Room B) to take the picture of the boy over there. The subject was told that he could play with the trains until the experimenter returned. When the experimenter returned, approximately sixty seconds later, he brought back the subject's picture plus one of several experimental pictures of the supposed other boy, depending upon the experimental group to which the subject had been randomly assigned. The experimenter then placed both pictures next to each other on a piece of cardboard directly in front of the subject, thus giving him a good look at the experimental picture. While doing this, the experimenter gave a brief verbal description of the boy supposedly using the trains in the next room. (In actuality, there was no other boy in Room B, only the research assistant.)

The control group subjects were shown a picture of a normal, healthy-looking boy of approximately the subject's own age. This picture was accompanied by the following verbal statement:

This is a picture of the boy who is going to be using the trains in the next room. He is a boy just about your age.
Some subjects (Experimental Group I) were shown a picture of a Negro boy of approximately the subject's own age. This picture was accompanied by the following verbal statement:

This is a picture of the boy who is going to be using the trains in the next room. He is a boy just about your age who is black. Do you have any black children in your class?

Other subjects (Experimental Group II) were shown a picture of a boy who had made a "funny face." This picture was accompanied by the following verbal statement:

This is a picture of the boy who is going to be playing with the trains in the next room. He is a boy just about your age who is mental, sort of a weirdo. Do you have any mental children or weirdos in your class?

(A sampling of all the first and fourth grade teachers to determine what words the children themselves used to label emotionally disturbed children revealed that the words "mental" and "weirdo" were most commonly used.)

The subjects in Experimental Group III were shown a picture of a physically handicapped boy in a wheelchair. This picture was accompanied by the following verbal statement:

This is a picture of the boy who is going to be playing with the trains in the next room. He is a boy just about your age who is crippled and can not walk. Do you have any crippled children in your class?
Copies of all of the experimental pictures are shown in the Appendix.

The subject was then told that the other boy's transformer had broken down so that his (the other boy's) train set-up had to be wired into his own train set-up. He was shown that the electric switch worked in such a way that when the switch was up and he was playing with his trains, the other boy's train would not work, but when the electric switch was down his train would not work and other boy's would work. (The subject was able to hear the tape recording of the train in Room B which he thought was the other boy playing with the train over there.) The subject was instructed to change the position of the electric switch several times to get a feeling of the situation and to get an understanding of the fact that by changing the position of the switch, he could control who got to play with the trains, himself or the other boy. The GraLab timer, which had been running all this time in order to activate the entire system, was then turned off. The experimenter set the timer for two minutes, explaining to the subject that both he and the other boy would have two minutes in which to play with the trains. He was told that when the timer came back to zero, after the two minutes had elapsed, a buzzer would sound and
the trains would automatically shut off regardless of who was playing with them at the time.

There were six two-minute train-sharing trials. On the first, third, and fifth trials, the switch was initially set by the experimenter in the upright position so that the subject had to "give up" his trains in order for the other boy to play with the other set of trains. On the second, fourth, and sixth trials, the switch was initially set by the experimenter in the downward position so that the subject had to "take away" the trains from the boy in the next room in order to play with his own trains. Once the timer on any one trial had started, the experimenter sat at a small desk in back of the subject trying to look busy, not paying any attention to the subject unless one of the train cars got derailed. The research assistant in Room B recorded the number of seconds on each trial that the subject allowed the other boy to play with the trains (i.e., the number of seconds the tape recording was active).

At the end of the six trials, each subject was interviewed briefly with the purpose of determining what, if any, feelings he had about the boy with whom he had shared the trains. In the interview the subject was asked whether he would like to meet the other boy
and what kinds of thoughts he had about what the other boy might be like.

Results

The amount of train playing time each subject allotted to the imaginary subject was the dependent variable in the study. There were six train-sharing trials for each subject. The mechanics of the sharing situation did not become clear to a number of the subjects in both age groups until after the first two trials had been completed. Consequently, for the purposes of data analysis, the first two trials were considered practice trials. Since any possible sequence or order effect across trials was not of interest in the present study, the two scores in each starting position were summed. Thus, in the data analysis, each subject had two scores. One score was the amount of train playing time allotted to the imaginary subject on trials three and five when the actual subject had started playing with the trains first. The other score was the amount of time allotted to the imaginary subject on trials four and six when the imaginary subject had started playing with the trains first. Each score could range from 0 to 240 seconds, the minimum and maximum
amounts of time the imaginary subject could have played with the trains on two trials.

The data were first analyzed by a three factor analysis of variance with repeated measurements on the last factor. The first factor was Age, which determined whether or not the first and fourth graders differed significantly from one another in the amount of train playing time they allotted to the imaginary subject, regardless of whom the imaginary subject was. The second factor was Stigma, which determined whether the amount of train playing time allotted to the imaginary subject varied significantly as a function of whether the imaginary subject was pictorially represented to the actual subject as normal, black, emotionally disturbed, or physically handicapped. The third factor was the Starting Position, which determined whether or not the amount of train playing time allotted to the imaginary subject varied significantly as a function of who started playing with the trains first. The analysis of variance also yielded measures of interactions between any two of the factors as well as a second order interaction between all three factors.

The repeated measurements analysis of variance of the above three factors is presented in summary form
in Table 1. There was a significant Age effect \( (F=11.54, \text{df}=1/72, p<.002) \) indicating that the fourth graders

**TABLE 1**

**ANALYSIS OF VARIANCE OF TRAIN PLAYING TIME ALLOCATED TO THE IMAGINARY SUBJECT**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
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<tr>
<td>Between Subjects</td>
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<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>11347.66</td>
<td>11.54</td>
<td>&lt;.002</td>
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<tr>
<td>Stigma</td>
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<td>1125.18</td>
<td>1.14</td>
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<td>Age x Stigma</td>
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<td>905.08</td>
<td>0.92</td>
<td></td>
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<td>Subjects/Groups</td>
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<td>983.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Subjects</td>
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<tr>
<td>Start. Pos.</td>
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<td>16851.02</td>
<td>58.52</td>
<td>&lt;.001</td>
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<tr>
<td>Age x Start. Pos.</td>
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<td>133.22</td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td>Stigma x Start. Pos.</td>
<td>3</td>
<td>200.98</td>
<td>0.70</td>
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</tr>
<tr>
<td>Age x Stigma x Start. Pos.</td>
<td>3</td>
<td>614.80</td>
<td>2.14</td>
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<tr>
<td>Start. Pos. x Subjects/Groups</td>
<td>72</td>
<td>287.92</td>
<td></td>
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</table>

allocated more of the train playing time \( (\bar{X}=123.03 \text{ seconds}) \) to the imaginary subject than the first graders \( (\bar{X}=103.53 \text{ seconds}) \), regardless of whom the imaginary subject was. There was no significant Stigma effect, indicating that across age groups, the amount of train playing time allocated to the imaginary subject did not differ significantly according to whether the imaginary subject was
pictorially represented as normal, black, emotionally disturbed, or physically handicapped. There was a significant Starting Position effect ($F=58.53, \text{df}=1/72, p<.001$) indicating that when the actual subject started playing with the trains first, he allotted less train playing time ($\bar{X}=104.55$ seconds) to the imaginary subject than when he did not start first ($\bar{X}=124.05$ seconds). There were no significant interactions between any of the three factors.

The major hypothesis of the study is that the first graders would not differentiate between the categories of stigmata in terms of their sharing behavior, whereas the fourth graders would respond differentially to the imaginary subject as a function of his being either normal, black, emotionally disturbed, or physically handicapped. Figure 1 shows the first and fourth grade means separately for each of the four different stigma groups. Although there was no significant Age x Stigma interaction in the overall analysis of variance, separate analyses of variance on the first and fourth grade data were done to further explore the major hypothesis. These separate analyses of variance seem justified on an a priori basis given the nature of the major hypothesis. The analysis on the first grade data alone revealed no significant stigma effect in
FIGURE 1
FIRST AND FOURTH GRADE MEANS FOR THE FOUR TYPES OF STIGMA

Train Playing Time Allotted to the Imaginary Subject (in seconds)

<table>
<thead>
<tr>
<th></th>
<th>First Grade</th>
<th>Fourth Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emot. Dist.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

140
130
120
110
100
0

<table>
<thead>
<tr>
<th>140</th>
<th>130</th>
<th>120</th>
<th>110</th>
<th>100</th>
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<tbody>
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<td></td>
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</tbody>
</table>
the first graders' sharing behavior. The analysis of the fourth grade data alone, presented in summary form in Table 2, revealed a significant stigma effect within

**TABLE 2**

**ANALYSIS OF VARIANCE OF TRAIN PLAYING TIME ALLOTTED TO THE IMAGINARY SUBJECT BY FOURTH GRADERS**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stigma</td>
<td>3</td>
<td>2256.6</td>
<td>4.66</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Subjects/Groups</td>
<td>36</td>
<td>484.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

the fourth grade data \((F=4.66, \, df=3/36, \, p<.01)\). While these two sets of results seem somewhat inconsistent with the lack of an Age x Stigma interaction in the overall analysis, they are consistent with and lend at least strong tentative support to the major hypothesis, that is that first graders would not differentiate between the categories of stigmata in terms of their sharing behavior whereas the fourth graders would respond differentially to the imaginary subject as a function of his being either normal, black, emotionally disturbed, or physically handicapped.
To further explore the nature of the Stigma effect in the fourth grade data, a Duncan's New Multiple Range Test was performed on the data. This analysis, comparing the four fourth grade means, is shown in summary form in Table 3. As can be seen from the table, the mean amounts of train playing time allotted by the fourth graders to the supposedly black child ($\bar{X}=130.75$ seconds) and to the supposedly physically handicapped child ($\bar{X}=129.65$ seconds) were both significantly higher ($p<.05$) than the mean amount of time allotted to the supposedly normal child ($\bar{X}=109.30$ seconds). There were no significant differences between any other comparisons of the fourth grade means.

To more clearly understand the different sharing patterns of the first and fourth graders, four t-tests were performed on the two means, a first grade mean and a fourth grade mean, at each level (category) of the stigma variable. These t-tests, presented in summary form in Table 4, revealed that there were no significant differences between the first and fourth graders in terms of the amount of train playing time they allotted to the imaginary subject when he was pictorially represented as normal or emotionally disturbed. When the imaginary subject was represented as black,
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Means</strong></td>
<td>109.30</td>
<td>122.40</td>
<td>129.65</td>
<td>130.75</td>
</tr>
<tr>
<td><strong>Shortest Significant Range</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td></td>
<td>13.10</td>
<td>20.35*</td>
<td>21.45*</td>
</tr>
<tr>
<td>Emot. Dist.</td>
<td></td>
<td></td>
<td>7.25</td>
<td>8.35</td>
</tr>
<tr>
<td>Phys. Hand.</td>
<td></td>
<td></td>
<td></td>
<td>1.10</td>
</tr>
<tr>
<td><strong>R_2 = 2.87 × 6.96 = 19.98</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>R_3 = 3.02 × 6.96 = 21.02</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>R_4 = 3.11 × 6.96 = 21.65</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P < .05 where the difference between any two means exceeds the shortest significant range.
the fourth graders allotted significantly more of the train playing time to the imaginary subject \((t=2.93, \, df=18, \, p<.01)\) than did the first graders. This was also the case when the imaginary subject was pictorially represented as physically handicapped \((t=2.61, \, df=18, \, p<.02)\). Thus, the significant Age effect in the overall analysis of variance was primarily a function of the first and fourth graders differential responses to the imaginary subject when he was pictorially represented as black or physically handicapped.

**TABLE 4**

T-TESTS COMPARING THE FIRST AND FOURTH GRADE MEANS AT EACH LEVEL (CATEGORY) OF THE STIGMA VARIABLE

<table>
<thead>
<tr>
<th>Stigma category</th>
<th>1st Graders</th>
<th>4th Graders</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>104.60</td>
<td>109.30</td>
<td>0.47</td>
</tr>
<tr>
<td>Black</td>
<td>107.30</td>
<td>130.75</td>
<td>2.93*</td>
</tr>
<tr>
<td>Emot. Dist.</td>
<td>102.55</td>
<td>122.40</td>
<td>1.80</td>
</tr>
<tr>
<td>Phys. Hand.</td>
<td>103.75</td>
<td>129.65</td>
<td>2.61**</td>
</tr>
</tbody>
</table>

*\(p<.01\)  
**\(p<.02\)
Discussion

The present study departs from most investigations of stigma in that the subjects were young children. Furthermore, those few studies conducted with children as subjects used attitudinal rather than behavioral measures of normals' responses to those who are stigmatized. The study is unique also in that the experimental design allows for the observation of normals' responses to representative instances of all three categories of stigmata rather than to just one specific stigma.

The experimental findings support the two major hypotheses. The first graders did not share any differently as a function of another child's being normal, black, physically handicapped, or emotionally disturbed, whereas the fourth graders did share differently as a function of the characteristics possessed by the child with whom they were sharing the trains.

There are two possible explanations for the lack of differentiation in sharing behavior exhibited by the first graders. First, there is the possibility that the experimental procedure of using photographs of the imaginary subject to identify the various stigmata was unsuccessful in terms of communicating
the stigma symbols to the first graders. Second, there is the possibility that, as hypothesized, stereotyped interpersonal responses to stigma, either hostile or supportive, are learned and although the first graders are able to cognitively perceive the stigma symbols, they have not yet learned the stereotyped responses to these symbols. The interview data on the first graders suggest that all three of the stigma symbols were clearly communicated to the first grade (as well as to the fourth grade) subjects. For example, in regard to the black imaginary subject, a typical first grade comment was, "I wanted to be fair with him because he looked like a nice boy. I wasn't surprised he was black. We have a black girl in our class." In regard to the physically handicapped boy, a typical first grade comment was, "I thought it was sad he was crippled." One first grader went so far as to say, "I thought I should let the crippled boy use the train more of the time because he couldn't walk." This was in spite of the fact that this particular subject had actually monopolized the use of the electric trains. This latter example raises an interesting possibility, namely that even though children in the first grade may have already learned
cognitively some of society's expectations regarding interpersonal responses to stigma, they do not yet respond differently themselves in terms of interpersonal behavior because of their basically egocentric view of the world (Cowan, Longer, Heavenrich, and Nathanson, 1969).

Perhaps the biggest question at the outset of the study was whether or not the stigma symbol of emotional disturbance could be made as identifiable as the other two stigma symbols. Interestingly enough, the interview data suggest that this stigma symbol was communicated at least as clearly as the others, even to the first graders. A typical first grade comment was, "I thought his eyes looked weird. He probably does crazy things like being naughty in class." Thus, it would appear that the experimental procedure of the present study was effective in communicating the stigma symbols to the first and fourth grade subjects. The lack of differentiation of sharing behavior across categories of stigma exhibited by the first graders, then, would seem to be the result of an incomplete social learning process whereby they have not yet learned the stereotypic interpersonal responses to stigma.

The fourth grade subjects, on the other hand, did share differently as a function of whether the child
with whom they were sharing was normal, black, physically handicapped, or emotionally disturbed. Contrary to what was expected on the basis of the findings of Goodman (1952) and Taylor (1966), the fourth graders gave a significantly greater percentage of train playing time to the black imaginary subject than they did to the normal imaginary subject. There are two possible hypotheses for this finding. First, the fourth grade subjects may have been motivated to give more of the train playing time to the black child for fear of reprisals on the part of the black child if they did not do so. That is, they might have thought that if they did not give much of the train playing time to the black child, he would be angry with them and physically aggress upon them at some later date. An alternative hypothesis is that the fourth graders may have learned middle class society's present-day ethic of civil rights or, in other words, may have introjected what might be termed "the white man's guilt" over injustices to the blacks which resulted in their making supportive responses to the black child by sharing the trains more liberally with him.

The interview data shed some light upon which of these two hypotheses is more accurate. When asked in
the interview whether or not they would like to meet the boy with whom they had been sharing the trains, nine out of ten fourth graders who had shared with a black imaginary subject said they would like to meet the other boy. If these subjects had been motivated by fear of the black child, it is unlikely that this many of them would have chosen to meet him. Furthermore, a typical interview response of a fourth grader who had shared the trains with a black child was, "I like the black kids here. He looks like a nice boy." These findings support the hypothesis that the greater percentage of train playing time given to the black imaginary subject was the result of a learning process in which these white, middle class subjects had learned to make positive, supportive interpersonal responses to blacks.

The fourth grade subjects also shared the trains more liberally with the physically handicapped child than with the normal child. The interview data again support the conclusion that this was a genuinely supportive gesture toward a type of person "less fortunate than ourselves." Typical of the fourth graders' comments about the physically handicapped child were, "I thought it was sad he was crippled," or "I felt
sorry for him. It's too bad he can't walk." This conclusion is consistent with those of Kleck (1968) and Farina et al. (1968) both of whom found that college age subjects responded to physically handicapped people with responses of sympathy and aid. In many ways the most difficult data to understand are the fourth graders sharing responses to the emotionally disturbed imaginary subject. At face value, there were no significant differences between the amount of train playing time given to the emotionally disturbed child as compared to the normal child although the amount of train playing time given to the former was somewhat greater. The interview data indicate that the stigma symbol of emotional disturbance was clearly communicated to the fourth graders, just as it was to the first graders. The following are some of the comments made by the fourth graders about the emotionally disturbed child: "I thought he was kooky. I don't want to meet him although I've known some mental kids before--they're not so bad"; "I thought he was trying to show off"; "I think he probably gets in a lot of fights"; "He probably has a messy room. He might make trouble in school like talk too much or take things belonging to other people."
Five of the ten fourth graders who had shared the trains with the emotionally disturbed boy did not want to meet him. This percentage (50 per cent) was noticeably higher than any of the other experimental groups, the next highest having been 20 percent in three of the other groups.

The tenor of most of this interview data on the emotionally disturbed child implies the existence of a basically negative attitude toward him on the part of these middle class fourth graders. The fact that there was a tendency on the part of these subjects to share the trains more liberally with this emotionally disturbed child seems somewhat paradoxical in light of the existence of a basically negative attitude toward him. One possible explanation of this seeming paradox is that the fear hypothesis, presented and rejected with regard to the black child, may have been operational in this instance. Thus, it is reasonable to assume that although the fourth graders have a basically negative attitude toward the emotionally disturbed child, they tend to share more liberally with him because they are afraid of making him angry and risking retaliation at some later date.

The secondary hypothesis that the fourth graders would share a significantly greater percentage of the
train playing time than would the first graders, across all categories of stigmata, was supported insofar as there was a significant age effect in the data. However, the main portion of the variance between the two age groups was due to different sharing responses only when the imaginary subject was black or physically handicapped. Thus, it is difficult to say whether the present study supported Handlon and Gross's (1959) finding that sharing behavior increases with age from kindergarten through sixth grade.

The other secondary hypothesis was clearly supported by the data in that the first and fourth graders did share a significantly smaller percentage of train playing time on those trials when they started playing with the trains and had to give them up than on those trials when the imaginary subject started and they had to take the trains away. This was true regardless of who the imaginary subject was. There are several possible explanations for this starting position effect. First, it seemed as if all of the subjects were fascinated by the novelty and smallness of the trains and it is difficult for children to give up something that they are playing with, especially
when it intrigues them. Second, it is likely that when the subjects started playing with the trains first they tended to think of the trains as belonging to them, whereas when the imaginary subject started first, they tended to think of the trains as belonging to the other boy.

Further Avenues of Research. Several questions about the nature of interpersonal responses to stigma as a function of age remain to be answered. It would be of interest to look at a wider age range of subjects to determine whether the stereotyped responses to stigma continue to be manifest, or perhaps become even more accentuated, after the fourth grade. In a related vein, it would also be useful to look at second and third graders' responses to stigma to determine whether the change between the first and fourth grades is a gradual, continuous one or more of a discrete, one step change at some point between the ages of six and ten.

There are a number of other factors, in addition to age, which may also be related to the development of stereotyped responses to stigma. The subjects in this study were uniformly from a middle to upper middle class suburban environment. It would
be of interest to replicate the study using children from a variety of socio-economic classes to determine whether the learning of stereotyped responses to stigma varies as a function of socio-economic class. It would also be of interest to replicate the study using female subjects to determine whether there is a sex difference in the learning of stereotyped responses to stigma. One final variant of the experimental design would be to use black children as subjects. Given the recent emphasis on black identity in the black community, and the cultural message that "black is beautiful," it would be interesting to determine whether "whiteness" has taken on the meaning of a stigma symbol in the black community.

The experimental design of the present investigation has a number of other possible uses apart from studying interpersonal responses to stigma. For example, there was enormous variability in the way the individual subjects shared the trains. Some subjects switched the trains from themselves to the imaginary subject, or vice versa, only once during a two-minute trial, whereas others kept switching the trains back and forth every ten or fifteen seconds. Thus, the experimental design could be useful in studying patterns of sharing behavior in and of themselves.
APPENDIX

SCHEMATIC REPRESENTATION OF THE WIRING

Tape Recorder

Wall between Room A and Room B

Timer

Train Transformer
PICTORIAL REPRESENTATION OF ROOM A (INCLUDING TRAIN SET-UP)

1. On-off switch to timer
2. Wire to tape recorder in Room B
3. Electrical switch
4. Transformer of train
5. Photographs
6. Manual track switch
7. Experimenter's table
First grade imaginary subject
(Normal)

First grade imaginary subject
(Black)
First grade imaginary subject
(Physically handicapped)

First grade imaginary subject
(Emotionally disturbed)
Fourth grade imaginary subject
(Normal)

Fourth grade imaginary subject
(Black)
Fourth grade imaginary subject (Physically handicapped)

Fourth grade imaginary subject (Emotionally disturbed)
REFERENCES


Kleck, R. E. Stigma conditions as elicitors of behavior in face to face interaction. Paper presented at A.P.A. meeting, 1968.

