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A STUDY OF SOCIAL VALUES OF MENTALLY RETARDED ADOLESCENTS

DISSEETATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Joseph E. Hubbard, B.S., M.S.

* * * * * *

The Ohio State University
1968

Approved by

[Signature]
Adviser
College of Education
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CHAPTER I

INTRODUCTION

The purpose of this study is to investigate the development of social values of mentally retarded (MR) adolescents. In the light of present day social unrest, it is important to determine if MR teen-agers do have values which can provide them with adequate guidelines to govern their behavior in social situations.

There also has been an increasing demand by professionals in the MR field for answers to questions such as: (a) how adequate are the social values of mentally retarded youngsters; (b) what effect, if any, does institutionalization have on retarded youngsters; (c) do the social values of retardates change as a function of age; and (d) are there differences in social values between male and female retardates?

In an attempt to answer some of these questions, a social values questionnaire was administered to MR teen-agers who were (a) living in residential institutions and (b) attending special classes in the public school while living in private homes. It was believed that the results of this questionnaire would not only demonstrate the nature
of social values of these retardates but also it might reveal differences due to age, sex, and living environment.

There were practical considerations which were taken into account when determining the number and age of subjects to be included in the study. The three age groups—twelve, fifteen, and eighteen years of age—were chosen because they appeared to be sufficiently representative of three distinct stages of adolescent development. It also appeared likely that these three age groups would still be available in large enough numbers in one or two institutions so that forty subjects per age group could be selected without spending a great deal of time locating them in several institutions scattered throughout the state of Ohio.

It was hypothesized that retardates living in the institutions would have different social values from those in the community. This difference was thought to be due to the high priority given to compliance in the institution and to the paramount need, as Goffman (1961) so aptly puts it, of ". . . seeing to it that everyone does what he has been clearly told is required of him, under conditions where one person's infraction is likely to stand out in relief against the visible, constantly examined compliance of the others" (pp. 6-7).

It also seemed logical to suppose that the younger subjects would not have social values as clearly defined as those of the older subjects due to fewer experiences in social
situations and to their immaturity. This lack of social acumen should be overcome as the mental age of the MR adolescent reaches the mid-teen level.

What effect mental retardation has on the social values of the boys in comparison to the girls is more difficult to determine, but it was thought that the differences would lie in the direction of the boys having greater social needs to be more aggressive and independent than the girls.

This research effort reflects the concern of many people in the professional field of mental retardation for increased information concerning the social needs of the mentally retarded individual. In recent years and especially since the appointment of the President's Panel on Mental Retardation in 1961, there has been an intensive search for ways to improve the conditions surrounding the mentally retarded in the United States through improving programs and services offered to them.

Even more recently, in their first report to the White House, the President's Committee on Mentally Retarded (1967) pleaded for new approaches in helping the mentally retarded to develop to their fullest potential (pp. 29-30). The present study is a response to this growing demand for a more thorough understanding of the social characteristics and needs of our mentally retarded citizens.
A careful search of the literature for the past five years revealed that the study of social values of the mentally retarded has received very little attention. There have been fewer than ten studies reported in the literature since 1963 and most of these studies have investigated the attitudes and emotional adjustment of the retarded. Only two studies could be located which related to the area of social values.

The first study (Conkey, Buchan & Farnham, 1966) discusses ways in which professional workers might counsel parents to help them to instill social values in their mentally retarded child. The primary purpose of the publication was to encourage professional workers to become aware of and focus on this important area of social values. The article made no effort to define the social values of the retarded child.

The second study (Edmonston, DeJung, and Leland, 1965) was concerned with the development of a "social perceptual" training curriculum for high school age, educable mentally retarded youngsters. Heavy emphasis was placed on social cue identification by the use of operant conditioning
techniques. This study also did not attempt to determine what social values the mentally retarded youngsters already held.

The research lag in this area is somewhat surprising and it may be due, in part, to the problems inherent in ascertaining what is meant by social values and how to convey this meaning to subjects who are retarded in their ability to grasp such abstract concepts. Moreover, the difficulty of communicating with the mentally retarded due to his limited understanding of words and his deficiency in reading skills is a contributing factor which discourages research in this area. Yet, it is evident that social values do exist for these youngsters as they seem to be reflected in their reactions to parental praise and punishment and their acceptance of and obedience to what the culture demands and what is identified as "good" behavior.

In social value research with the retarded, the problem is to make the identification of social values a simple enough task so that the retarded can successfully manage a response which will adequately delineate the nature of his social values. To do this the recording of the response must be simple, consistent, and on the same continuum for the entire test.

A review of the scales used in the study of social values reveals that the choice of an appropriate one to use with MR adolescents is quite limited. For instance, the
Minnesota Multiphasic Personality Inventory and the Edwards Personal Preference Schedule would be too difficult for use with MR subjects as they were primarily designed for use with adults.

The Allport-Vernon-Lindzey Study of Values, a later revision of the Allport-Vernon Study of Values, would be unsuitable because it is designed to be used with older adolescents and adults and it also taps theoretical, economic, aesthetic, political, religious, as well as social areas. Several of these areas are inappropriate and too abstract to serve as meaningful fields of inquiry with the retarded.

What is needed in order to do research with the slow learner is a social values test which provides a response set that is consistent over the entire test, answer sheets that are easy to use, and questions that are within the grasp of the retardate's experience. Such a test should also be usable with normal subjects in order to make comparative studies and provide normative data on the development of social values in the culture. Although this appears to be a rather large order, a test has recently become available which meets all of the above requirements.

Thompson and Gardner (1967) have developed an instrument which identifies the social values of normal subjects and significantly differentiates them from delinquents. This instrument can be adapted for use with mentally retarded subjects. The social values research developed by Thompson and
Gardner differs from the more traditional approach to the study of social values as is indicated by the following statement:

...In an evolving Judeo-Christian culture, we seem to have been more concerned with the "thou shalt not's" of the Ten Commandments than with prescriptive guides to altruistic and charitable actions (Rogers, 1964). Although juvenile delinquents and convicted criminals usually know (with a few pathological exceptions) that what they have done is "wrong" (Hartshorne & May, 1928-30), do they also know equally well what is "right" in the sense of guiding them to happiness and success in our culture? It would appear that such information, i.e., what actions have the highest probabilities of being positively reinforced, is vitally important to the well-being of the individual. To know only what not to do is insufficient; one must also have guides to those activities that define the "good life" in his culture (Morris, 1956). It also seems equally clear that an individual's approximations toward the good life typically involve compromises between personal need satisfactions and the demands and expectations of the culture. Neglect of one's needs leads inevitably to the empty life with associated feelings of being other-directed and of being used (Riesman, 1950). Neglect of cultural demands results in societal deprivations of privilege, withholding of social approval and rewards, or a combination of these barriers to happiness and success (Thompson & Gardner, 1967, pp. 1 & 2).

Thompson and Gardner developed an instrument which approaches the study of social values by investigating whether or not a subject understands which behaviors of a social nature will be positively and negatively reinforced by the culture in which he lives. The report of their research indicates that the Telenomic Trends Instrument does indeed permit normal teen-agers to distinguish between behaviors which will be positively and negatively reinforced. Moreover, the instrument further differentiates between juvenile
delinquents and non-delinquents in their perception of which social behaviors would result in a successful--happy or unsuccessful--unhappy life.

With these encouraging results, it would be desirable to investigate the use of this instrument with educable mentally retarded subjects. If it can be utilized in the study of retardates, then later studies may be conducted which could compare the results of normal and retarded children in order to better understand the development of social values in both classes of subjects.

**Telenomic Trends Instrument**

This instrument (see Appendix D), developed by Thompson and Gardner (1967), is based on Murray's Needs (1938) and the authors utilized Edward's work (1954) in developing the early forms of the instrument. After the preliminary work, eight items for each of thirteen needs were included in the final draft. A sample of these test items are presented in Table 1 below to give the reader some idea of the nature of the instrument.
### TABLE 1

**A SAMPLE OF ITEMS USED IN THE TELENOMIC TRENDS INSTRUMENT**

(Subjects are asked to decide whether each behavior tendency is taken from the life history of a happy-successful or an unhappy-unsuccesful person.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Endurance:</strong></td>
<td>&quot;Which one would finish any job that he begins?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would keep working at a puzzle or problem until it is solved?&quot;</td>
</tr>
<tr>
<td><strong>Nurturance:</strong></td>
<td>&quot;Which one would treat other people with kindness and sympathy?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would share his belongings, like clothes, money, or sporting equipment, with someone who needs them?&quot;</td>
</tr>
<tr>
<td><strong>Affiliation:</strong></td>
<td>&quot;Which one would make as many friends as he can?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would be with the crowd at a school activity?&quot;</td>
</tr>
<tr>
<td><strong>Deference:</strong></td>
<td>&quot;Which one would accept the leadership of people he admires?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would take suggestions from people he respects?&quot;</td>
</tr>
<tr>
<td><strong>Order:</strong></td>
<td>&quot;Which one would have his work organized and planned before beginning it?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would keep his personal belongings neat and in good order?&quot;</td>
</tr>
<tr>
<td><strong>Change:</strong></td>
<td>&quot;Which one would experiment and try new things?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would have the latest thing in clothes, records, and other things?&quot;</td>
</tr>
<tr>
<td><strong>Achievement:</strong></td>
<td>&quot;Which one would do his very best in whatever he tries to do?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would reach all of the goals he sets for himself?&quot;</td>
</tr>
<tr>
<td><strong>Intraceptions:</strong></td>
<td>&quot;Which one would judge people by why they do something, not by what they actually do?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would figure out why people do the things they do?&quot;</td>
</tr>
</tbody>
</table>
### TABLE 1 (Contd.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Succorance</td>
<td>&quot;Which one would get his friends to help him when he is in trouble?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would get his friends to do things for him when they are difficult?&quot;</td>
</tr>
<tr>
<td>Autonomy</td>
<td>&quot;Which one would be independent of others in deciding what he wants to do?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would do things in his own way without regard to what others may think?&quot;</td>
</tr>
<tr>
<td>Dominance</td>
<td>&quot;Which one would direct the actions of other people whenever he can?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would make the decisions when a group of people are together?&quot;</td>
</tr>
<tr>
<td>Exhibition</td>
<td>&quot;Which one would talk about his achievements?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would be the center of attention in a group?&quot;</td>
</tr>
<tr>
<td>Aggression</td>
<td>&quot;Which one would blame others when things go wrong?&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Which one would tell someone off when he thinks that a person has wronged him?&quot;</td>
</tr>
</tbody>
</table>
CHAPTER III

RESEARCH PROCEDURES

A total of 160 subjects were selected and given the Telenomic Trends Instrument. They were divided into two groups:

Group A: Age

One group of 120 subjects were residents in one of two state residential institutions for the mentally retarded in Ohio. The criterion for inclusion in the study was as follows:

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Males</th>
<th>Females</th>
<th>Average Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.5-12.5 years</td>
<td>20</td>
<td>20</td>
<td>12.11 yrs.</td>
</tr>
<tr>
<td>14.5-15.5 years</td>
<td>20</td>
<td>20</td>
<td>14.97 yrs.</td>
</tr>
<tr>
<td>17.5-18.5 years</td>
<td>20</td>
<td>20</td>
<td>17.99 yrs.</td>
</tr>
</tbody>
</table>

The twelve, fifteen, and eighteen year old age groups were chosen because they represented three distinct stages of adolescent development. It was thought that sufficient numbers of subjects would be available in the institution at each of these age levels so that there would be little difficulty in locating forty subjects at each age level.
It was discovered later that the twelve year olds were the most difficult subjects to locate in the institution. From discussions with staff, it was concluded that the increasing availability of community facilities in special education in Ohio is reducing the number of educable retardates in the institution especially at the twelve year and younger age groups as is illustrated below.

TABLE 3

AVERAGE LENGTH OF STAY OF SUBJECTS IN THE INSTITUTION

12 yr. olds; 2.66 yrs. (range in mo. 3-74)
15 yr. olds; 3.83 yrs. (range in mo. 2-101)
18 yr. olds; 5.42 yrs. (range in mo. 2-144)

Group B: Age

The second group of forty subjects were students in special education classes in the public schools of Columbus, Ohio, who were living in private homes. The criterion for inclusion in the study were as follows:

14.5--15.5 years--20 males & 20 females (avg. age-14.95 yrs.)

While it would have been desirable to include the same number and age levels of subjects attending special classes in the research, it was deemed to be too great an undertaking to test 120 subjects in special education classes in the public schools. The fifteen year olds were chosen to be the age group that would be included since they represented the midpoint in adolescent development, they were readily available in the junior high school, and they would
be the age group most likely to be attending school regularly since they are still too young to enter the adult work world.

**Group A and B: IQ**

Since the Telenomic Trends Instrument is essentially a verbal test of comprehension, it was found from a pilot study that residents in the 57 to 77 range of IQ could understand and respond to the questionnaire. Subjects with IQ's under 57 were discovered to be unable to sustain their attention and comprehension during the forty minutes required to complete the interview. Subjects with IQ's over 77 were thought to be too near the "normal" range of intelligence to be included.

**Administration of the Test**

Subjects were given an answer sheet, a pencil, and a picture of a successful, smiling person, and an unsuccessful, frowning person; every effort was made to create drawings which could represent either sex (see Appendix B). The examiner read each question concerning behavior aloud to the subject who was required to mark on the answer sheet and under the appropriate picture which person he thought would be most likely to engage in this behavior. It was found that the test could be administered to four subjects at one time; a procedure which provided ease in scheduling the youngsters as well as providing economy in time spent in collecting the data.
Description of Interview Procedures

Since there are 104 items to be answered on the Telenomic Trends Instrument (see Appendix D), it was considered essential to provide motivation to the retarded subjects to insure their continued effort throughout the testing period. By the time the slow learner in an institutional setting reaches the teenage years, he may have been rather thoroughly conditioned to failure in tasks related to school and, thus, his behavior may revert to a rather passive, random response which he hopes will be acceptable to the examiner.

To overcome this it was decided to use a reinforcement schedule which would provide a continuing successful experience for the subjects and reduce the likelihood of his giving up on the task or becoming inattentive. Candy was the reward and the reinforcement schedule was arranged in this sequence:

A. After a brief introduction (see Appendix A), four very simple and clear practice items were presented and verbal praise was administered to each subject individually. Then four more simple items were presented and the subjects marked their answer sheets at the top of the first page; after each item was presented, papers were checked, the correct answer given, and each subject praised. (These four items were counterbalanced; A-B-B-A.)
B. After the fourth item was marked, each paper was carefully examined, the subject praised again, and a Tootsie Roll was given to each subject.

C. At this point a card holding four Tootsie Rolls and a five cent candy bar was exhibited and the subjects were told that they might earn all of the candy if they continued to work hard on answering the questions. They were told that another Tootsie Roll would be given after each page had been completed and checked by the examiner, and the candy bar would be given at the completion of the questions.

D. After each twenty-six questions (see Appendix C), E carefully checked each score sheet for omissions and then rewarded the child with the candy regardless of his performance.

E. After the last question was asked, E inspected the last sheet of check marks, made sure the child had written his name legibly, and rewarded him with the candy bar.
CHAPTER IV

DESIGN FOR THE ANALYSIS OF DATA

The following hypotheses are the ones to be investigated in determining the nature of social values in mentally retarded adolescents:

1. Mentally retarded adolescent subjects are able to identify happy-successful and unhappy-unsuccessful behaviors as delineated by their responses on the Telenomic Trends Instrument.

2. Mentally retarded adolescent subjects will have different social values depending on whether they are male or female as delineated by their responses on the Telenomic Trends Instrument.

3. As the chronological age of mentally retarded adolescent subjects increases, the average means of the successful-happy variables will increase, and the average means of the unsuccessful-unhappy variables will decrease as delineated by their responses on the Telenomic Trends Instrument.

4. Mentally retarded adolescent subjects living in the institutional environment will have social values which differ from mentally retarded adolesc-
gent subjects who are living in the community as delineated by their responses on the Telenomic Trends Instrument.

To test the above hypotheses, the following statistical procedures were completed:

Hypothesis One

In order to investigate the feasibility of using the Telenomic Trends Instrument with retardates, a factor analysis with a varimax rotation of each of the thirteen variables was completed. If the instrument permits MR subjects to discriminate between socially approved and socially disapproved behaviors, there should be eight variables which show positive loadings on a factor identified as "socially approved" behavior and the remaining five variables should show negative loadings on the same factor which would be identified as "socially disapproved" behavior on the bipolar continuum.

Hypothesis Two

To test the differences in social values due to sex, three separate analysis were completed:

A. Fifteen year old subjects only (N=80). An analysis of variance was completed to test if there would be differences in the responses of the 40 males and 40 females of this age group.
B. Institutional group only (N=120). An analysis of variance was completed to test if there would be differences in the responses of the 60 males and 60 females of this group.

C. All subjects (N=160). An analysis of variance was completed to test if there would be differences in the responses of the 80 males and 80 females of this group.

Hypothesis Three

To test for differences in social values due to age, two separate analyses were completed:

A. Institutional group (N=120). An analysis of variance was completed to test if there would be differences in the responses of the three age groups—12, 15, and 18 year olds.

B. All subjects (N=106). An analysis of variance was completed to test if there would be differences in the responses of the three age groups—12, 15, and 18 year olds.

Hypothesis Four

To test for differences in social values due to community and institutional environment, one analysis was done. An analysis of variance was completed on the fifteen year old subjects (N=80) to test if there would be differences in the responses of the forty subjects living in the institution and the forty subjects living in the community.
Further Tests to be Completed

A. To determine if the age groups come from the same sample, the following three tests were completed:

1. The mean IQ of the two groups of fifteen year old subjects (N=80) (institution versus community) were tested for significant difference by analysis of variance.

2. The mean IQ of each of the three age groups of subjects (N=120) who live in the institution were tested for significant differences by analysis of variance.

3. The mean IQ of the three groups of all subjects (N=160) were tested for significant difference by analysis of variance.

B. To determine the reliability of the Telenomic Trends Instrument, split-half analyses were made using the Spearman Brown formula to estimate the reliability of the total test. The analyses were completed as listed below:

1. Twelve-year-old age level reliability of institutional subjects.

2. Fifteen-year-old age level reliability of institutional subjects.

3. Eighteen-year-old age level reliability of institutional subjects.

4. Fifteen-year-old age level reliability of special class subjects.
CHAPTER V

RESULTS AND CONCLUSIONS

The discussion of the results and conclusions is divided into five sections. The first four sections contain the results and discussion of the four hypotheses, and the last section is devoted to suggestions for further research.

Hypothesis One

Mentally retarded adolescent subjects are able to identify happy-successful and unhappy-unsuccessful behaviors as delineated by their responses on the Telenomic Trends Instrument.

The results (Table 4) of the factor analysis (rotated Varimax solutions) support this hypothesis but there are some disparities which require explanation. Instead of finding one factor as Thompson and Gardner did (see the "Normal Results" column in Table 4) with the eight successful variables receiving positive loadings, the factor analysis for MR subjects produced two factors.

Factor I of the MR results has consistently positive loadings on the eight successful-happy variables; a finding which corresponds to the results found by Thompson and
TABLE 4
FACTOR LOADINGS ON 13 VARIABLES OF THE TELENOMIC TRENDS INSTRUMENT ON TWO DIFFERENT POPULATIONS

<table>
<thead>
<tr>
<th>Variable</th>
<th>P1 Normal Results</th>
<th>F1 MR Results</th>
<th>F2 MR Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endurance</td>
<td>+.91</td>
<td>+.75</td>
<td>+.06</td>
</tr>
<tr>
<td>Nuturance</td>
<td>+.83</td>
<td>+.75</td>
<td>+.05</td>
</tr>
<tr>
<td>Affiliation</td>
<td>+.81</td>
<td>+.70</td>
<td>-.10</td>
</tr>
<tr>
<td>Deference</td>
<td>+.79</td>
<td>+.43</td>
<td>-.47</td>
</tr>
<tr>
<td>Order</td>
<td>+.76</td>
<td>+.74</td>
<td>-.02</td>
</tr>
<tr>
<td>Change</td>
<td>+.64</td>
<td>+.77</td>
<td>+.03</td>
</tr>
<tr>
<td>Achievement</td>
<td>+.64</td>
<td>+.69</td>
<td>-.26</td>
</tr>
<tr>
<td>Intraception</td>
<td>+.47</td>
<td>+.62</td>
<td>-.38</td>
</tr>
<tr>
<td>Succorance</td>
<td>-.17</td>
<td>+.40</td>
<td>-.46</td>
</tr>
<tr>
<td>Autonomy</td>
<td>-.32</td>
<td>+.08</td>
<td>-.83</td>
</tr>
<tr>
<td>Dominance</td>
<td>-.48</td>
<td>+.05</td>
<td>-.81</td>
</tr>
<tr>
<td>Exhibition</td>
<td>-.50</td>
<td>+.38</td>
<td>-.70</td>
</tr>
<tr>
<td>Aggression</td>
<td>-.82</td>
<td>-.07</td>
<td>-.83</td>
</tr>
</tbody>
</table>

F1 accounted for 30.19 of the variance of MR subjects.

F2 accounted for 24.45 of the variance of MR subjects.

Gardner in their research with normal subjects. This factor could be identified as a social approval factor.

The factor I loadings on the unsuccessful-unhappy variables were near zero on three of the five variables with two variables, succorance (+.40) and exhibition (+.38), showing small positive loadings. These two positive loadings on the unsuccessful variables may indicate that retardates are so often required to ask others for help, and they are encouraged to make others aware of their successes when they do occur, that they attribute much more valence to
succorance and exhibition as socially approved needs than do normal subjects.

Factor II of the MR results (Table 4) have five of the eight successful-happy variables loading near zero, with the other three—deference (-.47), achievement (-.26), and intraception (-.38) showing negative loadings. The five unsuccessful-unhappy variables all loaded heavily negatively on the factor; the factor could be identified as an aggressive autonomous factor.

These results suggest that, unlike normal subjects, MR subjects perceive the variables termed successful-happy as on a different continuum from the unsuccessful-unhappy ones. This inability to see it as opposite ends of the same continuum may be due to their limited capacity to intellectually abstract the construct of "social values" and apply it to "someone their own age" when responding to the questionnaire.

They may have, instead, imputed the socially approved behaviors to a "good" person, and the socially disapproved behaviors to a "bad" person. If they did choose on such a dichotomy, then "bad" behavior would require not only negative loadings on unsuccessful-unhappy variables but could also show negative loadings on deference (-.47), achievement (-.26), and intraception (-.38) needs since "bad" people would tend to not give deference to others, would not be achievers, and would not be concerned with the reaction of others. It is interesting to speculate that the youngsters may have seen
the socially approved behaviors as leading to release from the institution and the socially disapproved behaviors as those which would prevent such release.

Whatever the reason for the two factors, it is impor-
tant to note that six of the eight successful variables loaded very heavily on Factor I, and conversely four of the five negative variables loaded very heavily on Factor II. This suggests that the Telenomic Trends Instrument remains stable when used with different populations since it loaded on the behaviors in the direction predicted by the test.

The three variables which loaded on both factors (deference, intraception, and succorance) are variables which may be more difficult for retardates to understand. Their needs to ask for help from others, to relinquish their oppor-
tunities to others who have superior skills, and to attempt to predict the reactions of those upon whom they are depen-
dent must make retarded adolescents ambivalent as to whether these variables belong to the successful or unsuccessful behavior group.

Hypothesis Two

Mentally retarded adolescent subjects have different social values depending on whether they are male or female as delineated by their responses on the Telenomic Trends Instrument.

The results do not strongly support this hypothesis since only two variables out of the thirteen variables in the
instrument show significant differences due to sex. A careful comparison of the two graphs (Figures 1 and 2) reveals that the fifteen year old adolescents (Figure 1) were the subjects responsible for the boys showing significantly higher nurturance (p < .004) and succurance (p < .001) needs than girls. The graph (Figure 2) showing the results of all subjects reveals a less significant trend (nurturance p < .010 and succurance p < .003) when all eighty boys were compared with all eighty girls. Finally, when the twenty males and twenty females of the special class group were removed entirely from the analysis leaving only the institutional subjects, there were no sex differences between males and females in their social values. A study of the means indicates the true sex differences (see Table 5). For means and standard deviations of all variables see Appendix E.

Conclusions

To explain the significantly higher succurance and nurturance needs of the boys as compared to the girls is a matter of speculation. One might hypothesize that at fifteen years of age the youngsters have just entered puberty and it may well be that the boys at this age have greater needs to help and be helped than do girls due to cultural pressures. That is to say, this is the age when boys, much more than girls, are required to and, indeed, want to make definite plans for their future. For example, the fifteen year old retarded male may sense that his success in the future
Fig. 1.—Results of analysis of variance of need variables between 15-year-old males and female subjects.
Fig. 2.—Results of analysis of variance of need variables between all male and female subjects.
TABLE 5
MEANS AND STANDARD DEVIATIONS OF SUBJECTS ON NURTURANCE AND SUCCURANCE VARIABLES

<table>
<thead>
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depends heavily upon his receiving help from others and thus his high values on succurance represents to him a kind of insurance against failure. By the same token, his readiness to help others and the perception of himself as being able to help others would reinforce his feelings of self-worth and adequacy. During this age span, the fifteen year old mentally retarded boy should still have high expectations of his ultimate success in becoming independent since he has not yet been disillusioned by work failures nor forced to face the prospect that he probably will not be able to compete adequately in the labor market for many years to come, if at all. Thus, the implicit cultural pressure for him to "be a man" and begin to make his own way in the world could cause the succurance and nurturance needs to be greater than for girls.
Hypothesis Three

As the chronological age of mentally retarded adolescent subjects increases, the average means of the successful-happy variables will increase, and the average means of the unsuccessful-unhappy variables will decrease as delineated by their responses on the Telenomic Trends Instrument.

This hypothesis was only partly substantiated by the results. A study of Figure 3 will show that the age of subjects was not a significant factor on the happy-successful variables (one exception, Order, p < .019) although the eighteen-year-olds tended to have the higher scores. However, on the unhappy-unsuccessful continuum, four of the five variables were found to be significantly related to age but not in the order hypothesized.

Conclusions

There was only one significant difference between age groups mean scores on the successful-happy continuum (Figure 3) and that was found in the social need, "Order." To determine what influence the fifteen-year-old special class group had on this difference, the results were reanalyzed without the special class included. There were no significant changes (see Figure 4).

Since this significance level is at the .02 level, one must be cautious in interpreting this difference. However, it is likely that the eighteen-year-olds have had more experience in the areas of work and vocational training and,
Fig. 3.—Results of analysis of variance of need variables between all subjects by age groups.
Fig. 4 - Results of analysis of variance of need variables between institutional subjects by age groups.
consequently, they have been sensitized to the need for orderliness. It may also be true that most of the jobs for which they have been trained are jobs which require a premium on keeping everything in a highly structured pattern so they may proceed to the next step. Therefore, the eighteen-year-olds have a significantly higher appreciation of the need for order than do younger retardates.

While not significantly higher, the eighteen-year-olds had the highest average means on all happy-successful variables with the exception of one (Deference), and the fifteen-year-olds had the second highest means except for three variables (Nurturance, Deference, and Intraception). A study of Figure 4 will reveal that with the special class subjects eliminated from the analysis, the results did not change significantly. From these results one must conclude that the twelve-year-olds tend to respond almost in the same manner on the successful-happy variables as do the older subjects.

On four of the five unsuccessful-unhappy variables (see Figure 3) there was a significant difference between age groups with the fifteen-year-olds receiving the lowest means scores on three of the variables (Autonomy, Dominance, and Exhibition). A glance at Figure 4 reveals that the special class group was not responsible for the lower average on two of the three variables. It is evident that it was the relative high average means of the twelve-year-old group
which contributed to the difference found on these socially disapproved needs.

One explanation for the twelve-year-olds reluctance to identify these behaviors with the unsuccessful-unhappy behaviors may be due to his social inexperience. He has not as yet experienced the negative aspects of autonomy, dominance, and exhibition as has the older subjects and thus he identifies these more often as positive behaviors. As he matures it may well be that he over-reacts to these behaviors and at fifteen rather strongly rejects them. By the age of eighteen he has begun to appreciate the social situations where these variables are sometimes desirable and, therefore, the eighteen-year-old means reflect a more liberal attitude toward these needs. It is interesting to note that all age groups uniformly marked succorance behavior as if it were a part of the successful-happy rather than the unsuccessful-unhappy continuum. This may reflect an acute awareness of their need for help and supervision from others and their confusion about the social value of succorance may also be due to the rather consistent over-protection they have experienced for so many years of their life.

Hypothesis Four

Mentally retarded adolescent subjects living in the institutional environment have social values which differ from mentally retarded adolescent subjects who are living in
the community as delineated by their responses on the Telenomic Trends Instrument.

This hypothesis received support from the data but on only five of the thirteen variables on the Telenomic Trends Instrument. However, before discussing the results of the data testing this hypothesis in Figure 5, a significant difference between the IQ of these two groups of subjects must be discussed. There were no differences found in the mean IQ between the ages of the three groups of institutional subjects (twelve, fifteen, and eighteen year olds), but there was a very significant difference found in the fifteen-year-old subjects living in the institution and those living in the community—\( p < .001 \) with the IQ mean of 64.6 (S.D. 5.58) for the institutional subjects and an IQ of 71.3 (S.D. 4.42) for the community subjects.

This difference may be explained in this way. Those subjects who are less adequate tend to be placed in institutions while the brighter subjects tend to remain in the community. One cannot advance the hypothesis that the lower IQ's were due to being in the institution since in most cases the IQ's used were those which were gather upon entrance examination and before the subject had time to lose his earlier level of intellectual functioning due to institutionalization. Therefore, the difference in IQ between the groups implies that the community subjects in the study have always been more adequate in social behavior as well as IQ
Fig. 5.---Results of analysis of variance of need variables between 15-year-old community and institutional subjects.
than are their counterparts in the institution. One of the major reasons for institutionalization in the first place may be inadequate social and intelligence levels and one might expect that the more adequate youngster would be found in the community. With this in mind, let us review the results of the analysis.

There were only two variables which were significantly different on the successful continuum, Order \( (p < .023) \) and Achievement \( (p < .006) \) with the community subjects having higher mean scores. On the unsuccessful continuum three of the five variables show a significant difference with the community subjects lower on Autonomy \( (p < .005) \), Dominance \( (p < .001) \), and Aggression \( (p < .002) \). The differences were all in the direction that would be required by the IQ differences discussed above, that is, toward the responses of normal boys and girls.

Conclusions

After reflecting upon the difference found in the successful continuum (Figure 5), one can understand why the subjects in the community were higher in Order \( (p < .023) \) and Achievement \( (p < .006) \) than were the institutional subjects. Order and achievement are both necessary prerequisites for retarded individual's remaining in a competitive society, and the fifteen-year-old retardate certainly finds himself in very tough competition by virtue of his living in the community.
One might also hypothesize that most youngsters in special classes have a great deal of anxiety concerning failure since they have already demonstrated that they could not achieve success in regular classes. Therefore, they would see that, for them, it is mandatory to keep things orderly so that achievement may be as satisfactory as possible. It is likely that most of them have faced the alternative of either successfully achieving in the special classes or if they fail there, being put in an institution for "further" schooling.

The significant differences between the two groups of subjects on the unsuccessful continuum are again indicative of the attitudes which keep one from being placed in an institution. The lower mean scores on the variables Autonomy \( p < .005 \), Dominance \( p < .001 \), and Aggression \( p < .002 \) are all to be expected if the youngster wishes to remain in the culture. If one must constantly seek assistance from others; autonomy, dominance, and aggression must be seen as behavior to be shunned at every opportunity.

The two variables on the unsuccessful continuum which showed no significant differences—Succorance and Exhibition—are both less clearly defined as far as the mentally retarded are concerned. Mental retardates are encouraged to ask for help rather than to do something wrong so succorance may be viewed as acceptable social behavior by both groups. Mental retardates are also encouraged to exhibit their
successes (when they do accomplish them) so this, too, may be viewed as appropriate social behavior.

Reliability of the Instrument

To determine the reliability of the Telenomic Trends Instrument, an odd-even estimate of reliability was computed for each of the four age groups, and the Spearman-Brown formula was used to determine the reliability of the total test. The results are shown in the table below.

**TABLE 6**

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<td>Special Class</td>
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As the ages of subjects living in the institution increases, so did the reliability of the test. This result supports the conclusions to be drawn from Figure 4 which indicates that eighteen-year-old institutional subjects had the highest and/or lowest means in the direction predicted by the test on ten of the thirteen need variables.

The special class subjects' higher test reliability may be accounted for by their significantly higher IQ. This
high IQ permits them to identify social behaviors more reliably than their institutional counterparts. Figure 5 reveals that the special class subjects when compared with institutional subjects had the highest and/or lowest means in the direction predicted by the test on ten of the thirteen need variables. One may conclude that the brighter and older MR subjects are, the more reliable will be the Telenomic Trends Instrument data.

Suggestions for Further Research

The following are suggestions for further research which would seem to offer fruitful areas of inquiry. These represent only a few of the recommendations which could be offered in studying the social values of retardates.

Suggestion One: It would be of interest to determine if twelve, fifteen, and eighteen-year-olds in the community special class programs have different social values than their counterparts in normal classes. While the IQ of these two groups would be a source of variance, the educational milieu would be comparable and such research should permit a better understanding of how social values are affected in this culture when a person is labeled "mentally retarded."

The results of such research with both normal and retarded subjects would provide data on the social needs of both classes of subjects. It may well be that certain social stimulators such as peer approval and teacher praise have
very different meanings for retardates and for normals. Knowledge of their social needs may indicate there is need for a change in some aspects of the social milieu for both classes of subjects in the school environment.

Suggestion Two: A longitudinal study could be done which would involve testing fifteen-year-old retardates in special classes in the public schools. The data could be analyzed to isolate those subjects who have scores indicating low appreciation of good social behavior from those with scores revealing high appreciation of good social behavior. Three years later, the same subjects could be retested to determine if their social behaviors have changed. One could also hypothesize that the majority of those with high appreciation of social values would still be in school, while fewer of those with low scores would still be living in the community.

Suggestion Three: In order to study the institutional effect on social values, it would be necessary to design a longitudinal study where each subject is his own control. One would test the subjects every two years and as they are discharged from the institution a follow-up of the testing program could be done in the community. A comparison could be made on individual scores as well as on group scores. This procedure would overcome the difficulty of matching community and institutional groups of subjects which is a very difficult procedure.
The reason it is almost impossible to effectively match community and institutional subjects is due to the difficulty in clearly delineating groups from these two distinct environments. For example, many teen-age youngsters now in special classes have at one time resided in an institution so they contaminate the sample because of their previous experience. Moreover, some institutional subjects may have been living in this environment only a short time and have not had the full impact of institutionalization reflected in their social values.

On the other hand the institution teen-ager may have come from such an impoverished background that the social damage was experience prior to institutionalization. Thus, the social deprivation may be erroneously attributed to the institution when it is, in fact, the reason for institutionalization. Therefore, some of the variance could be removed if subjects could first be studied in the institution and later followed into the community with pre- and post results compared.

Suggestion Four: The Telenomic Trends Instrument may become a valuable aid in predicting the eventual success of subjects to satisfactorily adjust to the culture. Further work may reveal that certain patterns of social behaviors such as high aggression and autonomy needs may be indicators of the inability of a subject to remain in the community.
If such research permits the instrument to be used as a prognostic indicator, then studies could be conducted on subjects who are living in the community but who are "high risk" individuals—likely to be sent to an institution. These high risk subjects could be followed into the institutional environment and a clear idea of the impact of institutional living on social values could be achieved.

**Final Comment:** From the results of this study, it has been shown that the Telenomic Trends Instruments can be used effectively with mentally retarded subjects. The economy of data collection with the Telenomic Trends Instrument, the ease of administration, and the construct simplicity of the test are factors which strongly recommend further use and refinement of this research tool.
APPENDIX A
DIRECTIONS FOR ADMINISTERING THE TELENOMIC TRENDS INSTRUMENT TO MENTALLY RETARDED ADOLESCENTS

(A pencil and drawing, see Appendix B, was distributed.) You probably have a good idea of what a happy, successful person who is about your own age would do and think and what an unhappy, unsuccessful person would do and think. In front of you there is a drawing of two faces; place your finger on the picture of the happy, successful person (check). This person does things which make him (her) and others feel good and he (she) brings happiness and success to himself (herself).

Now place your finger on the picture of the unsuccessful and unhappy person. He (she) does things which upsets others and he (she) often makes himself (herself) unhappy and not successful.

I am going to ask you some questions about these two people and I want you to point with your finger to the person who would be most likely to do these things:

1. which one would be most likely to steal toys or food? (check & praise)
2. which one would love his mother the most? (check & praise)
3. which one would be most honest? (check & praise)
4. which one would not tell the truth? (check & praise)
Before I ask you some more questions about these two people, I am going to pass out some answer sheets (see Appendix C) on which you may check your answers (distribute). Please write your name on the line in the middle of the page where it says "My name is."

Right below your name it says "Mark your answers like this"; you may practice by filling in the two remaining spaces with a check mark (check & praise).

Now place the arrow at the top of the answer sheet so that it just touches the arrow under the pictures (demonstrate). Good, now I am going to ask you a question about these two persons in the pictures and I want you to make a check mark on line #1 beneath the picture of the person you choose for your answer. We are ready for question #1.

1. Which of these two persons would not like his teacher?
   (check & praise and give the correct answer) The answer is the unsuccessful, unhappy person.

2. Which would be the nicest person to play a game with?
   (check, etc.)

3. Which would help you if you had a problem? (check, etc.)

4. Which would blame others for his own mistakes? (check, etc.)

(After the fourth question, E checks each page individually). You have all completed this part of the game successfully, and you have each earned a tootsie roll (distribute). If you are able to answer the remaining questions as well, you
may be able to win as many as four more tootsie rolls and one candy bar, so do your very best (exhibit the card showing the four tootsie rolls and one candy bar).

Some of you may be wondering which answers are correct. There are no right or wrong answers; instead I want you to decide which one of these persons would do this behavior. Your idea may be different from someone else's idea but that is all right. We want to know which one of the persons in the drawing you think would do the things I am going to read to you. Remember we want your idea, so you decide which person would be most likely to behave in this way.

After I ask you each page of questions, I shall check your papers and give you the next tootsie roll if you have done a good job. Are you ready? Make sure the arrow on your answer sheet is touching the arrow on the pictures. Here is the first question. (begin)
APPENDIX B
MY NAME IS ____________________

(Mark your answers like this: ✓ ___ ___)
APPENDIX D
TELENOMIC TRENDS INSTRUMENT

1. Which one would make as many friends as he can?

2. Which one would get his friends to feel sorry for hims when he is sick?

3. Which one would be the leader in the group to which he belongs?

4. Which one would have his work organized and planned before beginning it?

5. Which one would help other people he feels are worse off than he is?

6. Which one would do his very best in everything he tries to do?

7. Which one would avoid doing things that people he respects might consider unusual?

8. Which one would tell other people what he thinks of them?

9. Which one would take part in new fads and fashions?

10. Which one would do things that other people regard as unusual or different?

11. Which one would finish any job that he begins?

12. Which one would tell funny stories and jokes at parties?

13. Which one would guess how his friends will act in various situations?

14. Which one would do things for his friends?

15. Which one would get his friends to cheer him up when he is sad?

16. Which one would direct the actions of other people whenever he can?

17. Which one would have any written work that he does, neat and well organized?

18. Which one would be generous with his friends?

19. Which one would do things better than other people can?

20. Which one would praise someone he admires?

21. Which one would attack ideas that are different from his own?

22. Which one would meet new people?

23. Which one would be independent of others in deciding what he wants to do?
24. Which one would stick at a task or problem even when it may seem as if he is not getting anywhere with it?

25. Which one would talk about his achievements?

26. Which one would judge people by why they do something, not by what they actually do?
1. Which one would do things with his friends rather than by himself?

2. Which one would get his friends to help him when he is in trouble?

3. Which one would tell other people how to do their jobs?

4. Which one would make a plan before starting in to do something difficult?

5. Which one would treat other people with kindness and sympathy?

6. Which one would reach all of the goals he sets for himself?

7. Which one would accept the leadership of people he admires?

8. Which one would get even when someone has insulted or hurt him?

9. Which one would do new and different things?

10. Which one would say what he thinks about things?

11. Which one would work hard at anything he tries to do?

12. Which one would be the center of attention in a group?

13. Which one would study and analyze the behavior of others?

14. Which one would be loyal to his friends?

15. Which one would get his friends to do many small favors for him?

16. Which one would try to get others to do what he wants them to do?

17. Which one would have his life so arranged that it runs smoothly and without much change in his plans?

18. Which one would sympathize with his friends when they are hurt or sick?

19. Which one would solve puzzles and problems that other people have difficulty with?

20. Which one would get suggestions from other people whose ideas he respects?

21. Which one would blame others when things go wrong?

22. Which one would experiment and try new things?

23. Which one would do things in his own way without regard to what others may think?

24. Which one would keep working at a puzzle or problem until it is solved.

25. Which one would ask questions which he knows no one will be able to answer?

26. Which one would understand how his friends feel about various problems they have to face?
1. Which one would be with the crowd at a school activity?

2. Which one would get a friend to help him with a problem?

3. Which one would make the decisions when a group of people are together?

4. Which one would have something planned carefully before he starts?

5. Which one would help his friends when they have problems?

6. Which one would be of the best athletes, club members, or students in the class?

7. Which one would accept the advice of people he respects?

8. Which one would get back at someone who has hurt him?

9. Which one would have the latest things in clothes, records, and other things?

10. Which one would do what he pleases in school, at home or with his friends?

11. Which one would finish something even though it may be difficult?

12. Which one would be the "life of the party?"

13. Which one would figure out why people do the things they do?

14. Which one would have friends among different groups of people?

15. Which one would get his friends to do things for him when they are difficult?

16. Which one would direct the activities of a group of people?

17. Which one would have things planned so that there won't be many last-minute changes?

18. Which one would be a friend to someone who is troubled?

19. Which one would be very successful where others may fail?

20. Which one would do the things that are expected of him by others whom he admires?

21. Which one would make fun of ideas that are different from his own?

22. Which one would go to new places?

23. Which one would do what he wants to do, rather than what others say he should?

24. Which one would work hard on anything he has agreed to do?

25. Which one would tell others about the unusual or startling things he has done?

26. Which one would guess what people will do in a certain situation?
1. Which one would stand up for his friends when they are criticized?
2. Which one would get a friend to listen to his troubles?
3. Which one would give orders to other people on a project?
4. Which one would do his work carefully and neatly?
5. Which one would be kind and helpful to other people?
6. Which one would do the best he can in the things in which he is interested?
7. Which one would let admired persons know when he likes something they have said or done?
8. Which one would tell someone off when he thinks that that person has wronged him?
9. Which one would try new and different activities?
10. Which one would express his own opinions regardless of the ideas of others?
11. Which one would concentrate on finishing one task before starting the next?
12. Which one would have other people watch him do something that he does well?
13. Which one would understand how people feel about the things they do and say?
14. Which one would do things that will help his crowd?
15. Which one would talk with a friend when making a difficult decision?
16. Which one would "run the show" in a particular activity?
17. Which one would keep his personal belongings neat and in good order?
18. Which one would share his belongings, like clothes, money, or sporting equipment, with someone who needs them?
19. Which one would succeed in whatever he sets out to do?
20. Which one would take suggestions from people he respects?
21. Which one would strike back when he has been harmed?
22. Which one would keep up-to-date in his ideas and activities?
23. Which one would do things in his own way, regardless of what people may think about him?
24. Which one would spend extra time on a project so that it will be finished when expected?
25. Which one would use language other people in a group do not usually use?
26. Which one would think about and try to understand the actions of his friends?
APPENDIX E
VARIABLES WHICH ARE SOCIALLY APPROVED MEANS AND STANDARD DEVIATIONS BY AGE, SEX, AND LIVING ENVIRONMENT

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BIBLIOGRAPHY


Thompson, G. G., and Gardner, E. F. "Adolescent's perceptions of happy-successful living." Accepted for publication in J. genetic Psychol.