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ABSTRACT

To identify the status of public knowledge about mental retardation, to discern public attitudes, and to obtain demographic information on attitudes, a questionnaire was submitted to approximately 1,515 subjects. Extensive results are reported by generic presentation of total responses, analysis of data by independent variables, and analysis of semantic differential. The major appendix provides information on the instrumentation for the study, the questionnaire, and the coding keys. Independent variables were sex, age, education, occupation, income, race, marital status, number of children, demography, geography, and religion. (JM)

PUBLIC AWARENESS ABOUT MENTAL RETARDATION

HENRY GOTTWALD

RESEARCH MONOGRAPH
THE COUNCIL FOR EXCEPTIONAL CHILDREN

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CEC Research Monograph

Public Awareness About Mental Retardation

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Contents

Introduction	1
Generic Presentation of Total Responses	5
Analysis of Data by Independent Variables	23
Analysis of Semantic Differential	57
References	62
Appendix A:	64
Instrumentation for Study	
Questionnaire	
Keys for Coding	
Appendix B:	79
Exhibits	
Appendix C:	80
Sample Design	



INTRODUCTION

Problem

Mental retardation is a major health, social, and economic problem to the entire nation. Unfortunately, it has been cloaked in an aura of myth and stigma that reflect a lack of knowledge and understanding. In turn, naiveté and misunderstanding have impeded progress in legislation and new programs. To effectively combat this total problem, it is essential that the public become informed about mental retardation and the scope of the problem it presents. In 1962 the President's Committee on Mental Retardation recommended a large scale public information program to "alert the entire nation to the magnitude of this problem." Efforts to this effect have been conducted by the Department of Health, Education, and Welfare, the Joseph P. Kennedy Jr. Foundation, the National Association for Retarded Children, and other organizations. Nevertheless, there remains a paucity of data revealing the current status of public awareness about mental retardation.

Articles concerning public knowledge about and attitudes toward mental retardation have appeared in various publications; however, review of this literature indicates that these articles are characterized by studies on small, select groups. The dearth of comprehensive studies involving public awareness about mental retardation indicates the need for a project of this nature.

Objectives

The primary purpose of this study was to conduct an empirical survey identifying the current status of public knowledge about mental retardation. Concomitant objectives were (a) to elicit or discern what attitudes the public has toward mental retardation, and (b) to identify and relate certain population or demographic characteristics to this

data. Implications of the aforementioned information are readily apparent; by determining the current status of public awareness, quantitatively and qualitatively, intelligent planning can be facilitated and the execution of long range programs can have direction.

Particular attention was focused upon:

1. What does the term "mental retardation" mean to the public?
2. What do people know about mental retardation in terms of the following aspects?
 - a. Significance of the problem (incidence)
 - b. Causes of mental retardation
 - c. Prevention
 - d. Services or programs available
 - e. Potential or prognosis for the mentally retarded
 - f. Range or degrees of retardation
3. What are public perceptions or attitudes toward the following aspects of mental retardation?
 - a. Institutionalization
 - b. Community life
 - c. Education
 - d. Employment
 - e. Citizenship
 - (1) General behavior
 - (2) Public responsibility
 - (3) Marriage
 - (4) Children
4. What are some variables affecting knowledge about mental retardation and attitudes toward mental retardation?
5. What are the various sources of information about mental retardation?
 - a. Personal contact
 - b. Communication media
 - (1) Television
 - (2) Newspapers
 - (3) Magazines
 - (4) Radio
 - (5) Other

Related Research

Related research concerning public knowledge about and attitudes toward mental retardation has appeared in various professional jour-

nals, particularly the *American Journal of Mental Deficiency* and *Exceptional Children*. Appraisal of these efforts revealed a paucity of research concerning general public awareness and attitudes about mental retardation. Also identified was a general theme reflecting studies on small, select groups. Perhaps the most significantly related study was one sponsored by the Minnesota Association for Retarded Children and the Minnesota Department of Public Welfare entitled "A Survey of Public Information and Attitudes on Mental Retardation in Minnesota (1962). This study attempted to assess public awareness within that state.

Generally, related research efforts can be classified into three major categories: (a) studies related to employment, (b) studies of parental or familial attitudes, and (c) studies of attitudes of students and professionals in related fields. (Appropriate references are included in the additional bibliography, p. 62.)

The paucity of comprehensive research in public awareness and attitudes toward mental retardation assumes a much greater magnitude when compared to the volume of money, legislation, and research directed to the area of mental retardation generally.

Procedures

In cooperation with the Survey Research Service, a Division of the National Opinion Research Center at the University of Chicago, a national modified probability sample of approximately 1,515 subjects was drawn for the study. (A complete description of the sample design is listed in "Sample Design" in the Appendix.)

Instrumentation for the study was drafted, modified, and incorporated into the questionnaire. (Complete instrumentation for this study is listed in the Appendix.) Pretesting of the questionnaire was accomplished by using a primary sampling unit. Appropriate changes and modifications were made, and, where feasible, probable responses were precoded for field use. Codes for open ended questions were also developed; however, these responses were recorded verbatim and later office coded by trained personnel. (Codes are listed in the Appendix.)

Data were collected through field interviews, using a staff of trained and experienced interviewers. Information was then transmitted to cards and prepared for analysis.

Analysis of Data

A study of this magnitude offered a virtually infinite number of possibilities for analysis. Practical considerations dictated limitations; it

was felt that the most salient and meaningful data were identified and analyzed. Descriptive statistics as well as measures of association and differences among groups were employed to analyze the data. The general format for reporting analysis of data was as follows:

1. Generic presentation of total sample responses
2. Analysis of data according to independent variables
 - a. Sex
 - b. Age
 - c. Education
 - d. Occupation
 - e. Income
 - f. Race
 - g. Marital status
 - h. Number of children
 - i. Demography
 - j. Geography
 - k. Religion
3. Analysis of semantic differential
 - a. General analysis
 - b. Factor analysis

GENERIC PRESENTATION OF TOTAL RESPONSES

To present the descriptive responses for the total population, the general format of the questionnaire will be followed and the nature of the inquiry will be stated.

Meaning of the Term "Mentally Retarded"

The initial question in the field interview was an open ended query asking, What does the phrase "mentally retarded" mean to you? As might be expected, responses were diverse. Office coding classified the responses (See Table 1). Table 2 presents a cross section of supplementary descriptive responses used in elaborating upon the initial statements.

TABLE 1
Meaning of the Phrase "Mentally Retarded" (N = 1,801)

<i>Definition</i>	<i>N</i>	<i>Percent</i>
Mentally deficient below normal intelligence	464	30.6
Mentally deficient due to birth injury, defects, brain damage	215	14.2
Mentally deficient due to other reasons	13	.9
Slow learner or incapable of learning	276	18.2
Lacks judgment, maturity, responsibility	15	1.0
Mentally ill	99	6.5
Not right, sick	111	7.3
Miscellaneous	287	19.2
Don't know or irrelevant answer	100	6.6
No response	227	1.4

Note:—Percentage based upon response frequency relative to sample size (N = 1,515). In several questions, respondents gave multiple responses which increased the N.

Almost half of the respondents (45 percent) described the phrase "mentally retarded" in terms of "mental deficiency," many of them

giving supplementary information. Inspection of Tables 1 and 2 show that multiple responses increased the aggregate total beyond the sample size (1,515). All respondents associated mental ineptitude and/or learning problems with mental retardation. Inspection of Table 1 also shows that erroneous or confused responses were evident. Of particular interest in Table 2 is the fact that only 1.1 percent of the population attempted to differentiate in terms of the amount or degree of mental retardation.

TABLE 2
Supplemental Phrases and Comments About the Term "Mentally Retarded"
(N = 421)

<i>Additional Comments</i>	<i>N</i>	<i>Percent</i>
Unable to support self	123	8.1
Need care, help, treatment	99	6.5
Physical appearance handicapped	97	6.4
Can be trained for some things	15	1.0
Distinguished levels—"not all alike"	16	1.1
Expression of sympathy	71	4.7

Sources of Information about Mental Retardation

Respondents were asked whether or not they had heard or read anything about mental retardation in the past few months. Sixty-nine percent (1,046) of the sample answered affirmatively; Table 3 identifies the sources of information for these respondents. Again, multiple responses exceeded the sample size; however, percentages were stated against the total population (1,515). Television was easily the most frequently mentioned media of communication (50 percent), with newspapers (36 percent) and magazines (28 percent) in rank order.

TABLE 3
Sources of Information about Mental Retardation (N = 2,695)

<i>Source</i>	<i>N</i>	<i>Percent</i>
Newspapers	550	36.3
Magazines	427	28.2
Books	76	5.0
Radio	215	14.2
Television	757	50.0
Movies	28	1.8
Lectures	65	4.3
Conversation	214	14.1
Other	281	18.5

TABLE 4
Respondent Estimate for Incidence of Various Disorders (Per 1,000 Population)
(N = 1,515)

Estimation	Mental retardation		Blindness		Cerebral palsy		Paralytic polio		Rheumatic heart disease	
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
Zero	1		3	.1	7	.4	16	1.0	6	.3
One	173	11.4	283	18.6	286	18.8	410	27.0	169	11.1
2-4	85	5.6	179	11.8	206	13.5	214	14.1	174	11.4
5-9	293	19.3	355	23.4	320	21.1	273	18.0	307	20.2
10-24	494	32.6	279	18.4	265	17.4	213	14.0	345	22.7
25-49	141	9.3	121	7.9	100	6.6	99	6.5	148	9.7
50-99	82	5.4	50	3.3	57	3.7	58	3.8	77	5.1
200-299	94	6.2	68*	4.4	49	3.2	36	2.3	88	5.8
300 +	34	2.2	23	1.5	15	.9	12	.7	27	1.7
Don't know	34	2.3	70	4.6	126	8.3	100	6.6	90	6.0

A total of 469 (31 percent) of the total sample indicated that they had neither heard nor read of mental retardation in the past few months. This group was then asked whether they had ever heard of mental retardation, and 385 answered affirmatively and 84 answered negatively. These 84 (5.5 percent) respondents were not permitted to continue the questionnaire.

Incidence of Mental Retardation

Respondents were asked to estimate the incidence of mental retardation per 1,000 population. The same question was then posed for blindness, cerebral palsy, polio, and rheumatic heart disease.

Inspection of Table 4 reveals the naiveté of respondents in terms of incidence for all the mentioned disability areas (see exhibit B in Appendix). It appears that few people recognized the fact that there are approximately 6 million retarded people in the United States (see exhibit C in Appendix).

Not directly visible in Table 4 is the tendency for respondents to answer in terms of round numbers (one, 5, 10, 25, 50, etc.). With the exception of the lowest range (2-4 per 1,000), spread ranges were heavily dominated by the lowest round figure indicated in each category.

Causes of Mental Retardation

In identifying the most common causes of mental retardation, respondents most frequently mentioned birth injury (40 percent), followed by adverse prenatal factors (30 percent), and heredity (27 percent). Again, multiple answers exceeded the number of respondents; however, percentages were computed on the frequency mentioned in the total sample population.

TABLE 5
Causes of Mental Retardation Identified by Respondents
(N = 2,670)

<i>Cause</i>	<i>N</i>	<i>Percent</i>
Heredity	410	27.1
Birth injury	604	39.9
Disease/illness	251	16.6
Accident/trauma	226	14.9
Prenatal factors	447	29.5
Other	378	25.0
Don't know	166	11.0
Irrelevant response	94	6.2
No answer	12	.7

Prevention of Mental Retardation

The question Can mental retardation be prevented? was posed to respondents. It is interesting to note that 51 percent (778) of the total sample answered negatively. "Yes" respondents were requested to indicate means by which mental retardation could be prevented (see Table 6).

TABLE 6
How to Prevent Mental Retardation (N = 641)

<i>Technique</i>	<i>N</i>	<i>Percent</i>
Prenatal care of mother	249	16.4
Better obstetrics	77	5.1
Sterilize unfit parents	19	1.3
Better diet/nutrition	23	1.5
Research	49	3.2
Vague responses re parents' habits	40	2.6
Religion	4	.3
PKU Test	50	3.3
Other	99	6.5
Don't know	92	6.1

Prenatal care (16.4 percent) and better obstetrics (5.1 percent) were the major specific areas identified. Research (3.2 percent) and general confidence in doctors or science (6.1 percent) indicate that a composite 9.3 percent of the total sample were optimistic about the prevention of mental retardation but could not identify means of accomplishing it. Fifty respondents specifically named testing for phenylketonuria (PKU). A surprisingly low number of respondents, 19 (1.3 percent) mentioned the sterilization of unfit parents as a measure.

"Social Worth" of the Mentally Retarded

Respondents were requested to rate the mentally retarded on a number of "social worth" factors indicating proportionate groupings under a number of roles.

As might be expected, on a 5 point scale the central rank was well represented. When considering the mentally retarded as employees, there was a fairly equitable distribution. Favorable polarities were reflected when identifying the mentally retarded as good friends (44 percent), neighbors (48 percent), and citizens (41 percent). However, a complete reversal was evident when the mentally retarded were evaluated as poor parents (55 percent) and poor husbands or wives (49 percent).

TABLE 7
Perceptions of Social Worth of the Mentally Retarded as Indicated
by Respondents (N = 1,515)

<i>What proportion of the mentally retarded would make good:</i>	<i>Employees</i>		<i>Neighbors</i>		<i>Friends</i>		<i>Citizens</i>		<i>Parents</i>		<i>Husbands/ Wives</i>	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Almost all	139	9.2	251	16.6	259	17.1	296	19.5	52	3.4	58	3.8
Most	321	21.2	477	31.5	408	26.9	450	29.7	105	6.9	135	8.9
Some	633	41.8	465	30.7	478	31.6	427	28.2	358	23.6	419	27.7
Only a few	282	18.6	181	11.9	217	14.3	188	12.4	455	30.0	447	29.5
None	37	2.4	24	1.6	31	2.0	36	2.4	385	25.4	288	19.0
Don't know	16	1.1	29	1.9	31	2.0	29	1.9	68	4.5	78	5.1
Not answered	5	.2	4	.3	7	.5	5	.3	8	.6	6	.5

TABLE 8
Respondents' Attitudes Towards Various Roles for the Mentally Retarded
(N = 1,344)

Should mentally retarded individuals:	Go downtown alone.		Get medical care at regular hospital.		Use public beaches and/ or playgrounds		Drink liquor		Drive a Car		Vote		Marry		Have family (children)	
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
Yes	447	29.5	1167	77.0	1080	71.3	102	6.7	184	12.1	570	37.6	487	32.1	300	19.3
No	883	58.3	236	15.6	303	20.0	1269	83.8	1174	77.5	742	49.0	817	53.9	1002	66.1
Don't know	97	6.4	26	1.7	42	2.8	57	3.8	69	4.6	113	7.5	121	8.0	125	8.3
Didn't answer	4	.3	2	.2	6	.5	3	.3	4	.3	6	.5	6	.5	4	.3

Participation in Various Roles

A series of potential roles, functions, and activities were presented to respondents. They were requested to indicate approval or disapproval regarding participation of mentally retarded individuals in the identified activities.

Positive responses were elicited in terms of using public facilities and hospitals. Drinking liquor received an overwhelming "no" vote (84 percent); other negative responses included going downtown alone (58 percent), driving (78 percent), voting (49 percent), marrying (54 percent), and having a family (66 percent).

An attempt to obtain amplification on the "no" responses was made by asking the respondents to relate reasons for their negative attitudes. These answers were then coded according to the nature of the concern, i.e., concern for the mentally retarded person, concern for others (society), or concern for both the mentally retarded person and others.

TABLE 9
Reasons for "No" Responses on Table 8 (N = 1,344)

<i>Reason</i>	<i>N</i>	<i>Percent</i>
Respondent's concern for the health and safety of the retarded individual	420	27.7
Respondent's concern for others (harmed by the retarded person)	128	8.4
Respondent's concern for the retarded and others	193	12.7
Answer cannot be evaluated in these terms	603	39.8

Most of the specific responses indicated concern for the mentally retarded person (28 percent). Unfortunately, 40 percent of the responses were extremely diverse and could not be evaluated under the stated terms, nor could they be coded differently.

Identification of Services Available to the Mentally Retarded

Respondents were asked to identify local or state services which were available to the mentally retarded. Education (49 percent), clinics or hospitals (33 percent), and institutions (31 percent) were the services most frequently mentioned. A total of 17 percent of the sample did not identify a service to the mentally retarded. Multiple responses were used again.

Ranking of Services for the Mentally Retarded

Subsequent to identifying services for the retarded (Table 10), respondents were given a list of seven potential services and requested to

TABLE 10
Services Available to Retarded Persons (N = 2,505)

<i>Service</i>	<i>N</i>	<i>Percent</i>
School/education	740	48.8
Institutions	476	31.4
Hospitals and clinics	504	33.3
Associations for retarded children	124	8.2
Social agency	139	9.2
Church	57	3.8
Other	212	14.0
Don't know	169	11.2

identify the three most important ones in rank order (Table 11). Education was unquestionably ranked as the most important service, with research in second place. Job training centers and parent counseling received considerable mention, while institutions, foster homes, and day care centers completed the sequence. Whether in individual or in aggregate form (combined first, second, and third most important mentions), the sequence identified remained constant.

TABLE 11
Rating of Most Important Services for the Retarded (N = 1,515)

<i>Service</i>	<i>Most important</i>		<i>Second most important</i>		<i>Third most important</i>		<i>Aggregate 1st, 2nd, and 3rd mentions</i>	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Special classes—education	591	39.0	417	27.5	171	11.3	1179	77.8
Research—study causes	408	26.9	328	21.7	258	17.0	994	65.6
Foster homes	34	2.2	61	4.0	90	5.9	185	12.2
Counseling for parents	140	9.2	254	16.8	291	19.2	645	42.5
Institutions	70	4.6	60	4.0	97	6.4	227	14.9
Centers where retardates can learn jobs	157	10.4	270	17.8	430	28.4	657	43.3
Day care centers	13	.9	25	1.7	75	5.0	113	7.4

Knowledge of Groups or Associations Working to Help the Retarded

Respondents were asked whether they had heard of any group or organization that was working to help the mentally retarded. A total of

56 percent, or 849 respondents, answered affirmatively, and 503 (38.5 percent) responded negatively. "Yes" respondents were then asked to identify the groups or associations with which they were familiar (Table 12). Of 985 organizations mentioned, 284, primarily local groups, could not be coded. A large percentage of the sample (16 percent) had heard of groups working to help the mentally retarded, but could not identify any at the time of the interview. Association for Retarded Children, various service organizations, and the Joseph P. Kennedy Jr. Foundation were most frequently named. Again, multiple responses surpassed the stated number of "yes" respondents.

TABLE 12
Identification of Groups or Associations (N = 985)

<i>Group</i>	<i>N</i>	<i>Percent</i>
Association for Retarded Children	164	10.8
Kennedy Foundation	102	6.7
The Council for Exceptional Children	15	1.0
Church	52	3.5
Service organizations	120	7.9
Other	284	18.7
Don't know	248	16.4

Respondents were then questioned about whether they or their families had been in a program or drive to help the retarded, and if the answer were affirmative, they were asked to identify their particular role. A total of 25 percent (378) indicated they had and 31.1 percent (471) said they hadn't. Only 65 people (4.3 percent) had ever donated direct service.

TABLE 13
Role Played by Respondent (N = 506)

<i>Role</i>	<i>N</i>	<i>Percent</i>
Money	273	19.0
Time	149	9.8
Direct service	65	4.3
Other	21	1.4

Attitudes Toward the Mentally Retarded

Respondents were given a card with a number of statements reflecting popular beliefs or attitudes about the mentally retarded. They were instructed to assign appropriate proportions of the retarded to each of the various statements. Inspection of Table 14 indicates a central tendency

in ranking. Most of the responses reflected what could be interpreted as a slightly favorable attitude towards the mentally retarded.

Miscellaneous Statements about the Mentally Retarded

A list of statements relative to mental retardation was read to each respondent in an attempt to elicit the extent of agreement or disagreement with each statement. Response alternatives were strongly agree, agree, don't know, disagree, and strongly disagree. The statements and responses are indicated in Table 15. Strong polarities in agreement indicated that (a) mentally retarded children have the right to education, (b) parents of mentally retarded children can have other normal children, and (c) parents should allow their normal children to play with retarded youngsters.

Interpreting strong polarities of disagreement, one can see that the respondents felt that (a) a mentally retarded person living in the neighborhood would not lower property values, (b) the expense of programs for the retarded is not too great considering what retarded gain from them, and (c) parents are willing to send their children to a school which has special classes.

Other statements indicated that respondents felt that (a) mentally retarded individuals tend to know that they are different from normal people, (b) mentally retarded youths should expect to participate in teenage community activities, (c) a retarded person can usually be identified by looks or appearance, and (d) most people feel uncomfortable in the presence of a retarded person.

Rating Retarded People on Ability to Perform Various Functions

Respondents were given a list of functions reflecting various abilities; they were instructed to indicate the proportion of the mentally retarded to whom these statements applied (Table 16). Answers showed that respondents felt the vast majority of the retarded could acquire self care habits (feeding and dressing themselves) and that most could acquire some academic skills, learn to use public transportation, and learn to do simple manual or physical skills (sew, dance). In contrast, respondents felt that few retarded persons could learn to drive a car or could hold a regular job.

Respondents who indicated that the mentally retarded person could hold a regular job were questioned about what kind of job. Answers shown in Table 17 reveal, as might be expected, that skilled and semi-skilled occupations were heavily favored.

TABLE 14
Grouping the Retarded on Various Statements (N = 1,515)

What proportion of mentally retarded persons:	Look different		Are mentally ill or insane		Can live "normal" lives		Should be in institu- tions		Had men- tally retarded parents		Can have normal children		Should be cared for at home		Can be self sup- porting		Can never learn to do anything for themselves	
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
Almost all	259	17.1	60	4.0	156	10.3	51	3.4	15	1.0	123	8.1	136	9.0	68	4.5	24	1.6
Most	322	21.3	104	6.9	498	32.9	117	7.7	48	3.2	223	14.7	370	24.4	297	19.6	65	4.3
Some	454	30.0	406	26.8	517	34.1	531	35.0	374	24.7	390	25.7	552	36.4	586	38.7	318	21.0
Few	329	21.7	661	43.6	213	14.1	640	42.2	680	44.9	335	22.1	271	17.9	385	25.4	914	60.3
None	53	3.5	107	7.1	23	1.5	47	3.1	138	9.1	150	9.9	71	4.7	67	4.4	87	5.7
Don't know	14	.9	38	5.8	19	1.3	40	2.6	172	11.4	205	13.5	26	1.7	24	1.6	23	1.5
Not answered	0	.0	5	.4	5	.4	5	.4	4	.3	5	.4	5	.4	4	.3	0	.0

TABLE 15
Agreement upon Miscellaneous Statements Regarding the Mentally Retarded
(N = 1,515)

Respondent's choice	MR never know they differ from other people	A MR adult living in neighborhood would tend to lower property values		Programs for MR are too expensive in relation to what the MR gains from them		A MR youth should not expect to participate in teenage community activities		You can usually tell a MR by his looks/appearance		Most parents of MR can have other normal children		Parents should allow normal child to play with MR child		I would not want my child to attend a school that also has the presence of MR children		Most people feel uncomfortable in the presence of MR person	
		MR children have a right to public education		MR children have a right to public education		MR children have a right to public education		MR children have a right to public education		MR children have a right to public education		MR children have a right to public education		MR children have a right to public education		MR children have a right to public education	
Agree strongly	92	451	16	29	20	123	536	305	16	94							
	6.1*	29.8	1.1	1.9	1.3	8.1	35.4	20.1	1.1	6.2							
Agree	452	777	113	161	305	634	803	931	122	738							
	29.8	51.3	7.5	10.6	20.1	41.8	53.0	61.5	8.1	48.7							
Disagree	681	150	713	691	802	515	41	144	772	480							
	45.0	9.9	47.1	45.6	52.9	34.0	2.7	9.5	51.0	31.7							
Disagree strongly	153	36	554	431	233	136	12	8	498	79							
	10.1	2.4	36.6	28.4	15.4	9.0	.8	.5	32.9	5.2							
Don't know	52	12	33	119	69	23	36	40	21	37							
	3.4	.8	2.2	7.9	4.6	1.5	2.4	2.6	1.4	2.4							
Not answered	1	5	2	0	2	0	3	3	2	3							
	.1	.4	.2		.2		.2	.2		.2							

* The dropped figure represents percentage of respondents in each category.

TABLE 16
Grouping the Retarded on Various Roles and Activities (N = 1,515)

What proportion of the retarded can:	Learn to read and write		Learn to add and subtract		Learn to feed themselves		Learn to dress themselves		Learn to use public transportation		Learn to do simple sewing		Learn to drive a car		Learn to dance		Have a regular job	
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
Almost all	229	15.1	145	9.6	505	33.3	451	29.8	395	26.1	151	10.0	34	2.2	205	13.5	83	5.5
Most	504	33.3	429	28.3	685	45.2	681	45.0	553	36.5	428	28.3	95	6.3	438	28.9	312	20.6
Some	521	34.4	578	38.2	200	13.2	239	15.8	275	18.2	587	38.7	429	28.3	478	31.6	620	40.9
Few	151	10.0	247	16.3	33	2.2	49	3.2	275	18.2	220	14.5	506	33.4	251	16.6	320	21.1
None	4	.3	12	.8	1	.1	1	.1	36	2.4	23	1.5	319	21.1	34	2.2	65	4.3
Don't know	21	1.4	19	1.3	5	.3	9	.6	20	1.3	16	1.1	46	3.0	23	1.5	27	1.8
Not answered	1	.1	1	.1	2	.1	1	.1	4	.3	6	.4	2	.1	2	.1	4	.3

TABLE 17
Kinds of Jobs Mentally Retarded Individuals Can Do (N = 1,798)

<i>Job</i>	<i>N</i>	<i>Percent</i>
Professional, technical, and kindred workers	27	1.8
Farmers and farm managers	5	.3
Managers, officials, proprietors (except farm)	0	.0
Sales workers	53	3.5
Clerical and kindred workers	227	15.0
Craftsmen, foremen, and kindred workers	118	7.8
Operatives and kindred workers	538	35.5
Service workers except household	465	30.7
Farm laborers and foremen	116	7.7
Laborers, except farm and mine	249	16.4

Note:—Occupations based on 1950 census code

"Cures" for Mental Retardation

The question Can mental retardation be cured? was posed to respondents, and 187 respondents (12.8 percent) answered affirmatively. These affirmative respondents were subsequently asked to indicate how mental retardation could be cured (Table 18). Analysis of stated means for "curing" mental retardation indicated more optimism ("through research," etc.) than specific answers. Phenylketonuria testing and early diagnosis were mentioned.

TABLE 18
Can Mental Retardation Be Cured? (N = 1,515)

<i>Method or technique</i>	<i>N</i>	<i>Percent</i>
PKU test or early diagnosis and treatment	26	1.7
Education, training, guidance	36	2.4
Kindness, understanding	9	.6
Medical care and therapy	60	4.0
Psychiatric care and therapy	11	.7
Research and further study	22	1.5
Patterning	3	.2
Miscellaneous	10	.7
Don't know or uncodable answers	25	1.7

Semantic Differential

Respondents were informed at this point in the interview that the topic would shift from the mentally retarded to the normal. A semantic differential sheet of 16 combinations (mixed polarities) on a 7 point scale was presented. Respondents were instructed on scoring in terms of how they might describe a normal person (Figure 1).

Upon completion of this task, interviewers asked respondents whether they were thinking of a child or adult, a male or female (Table 19). Data indicated that most respondents were thinking of an adult. Males were mentioned 3 times as often as females.

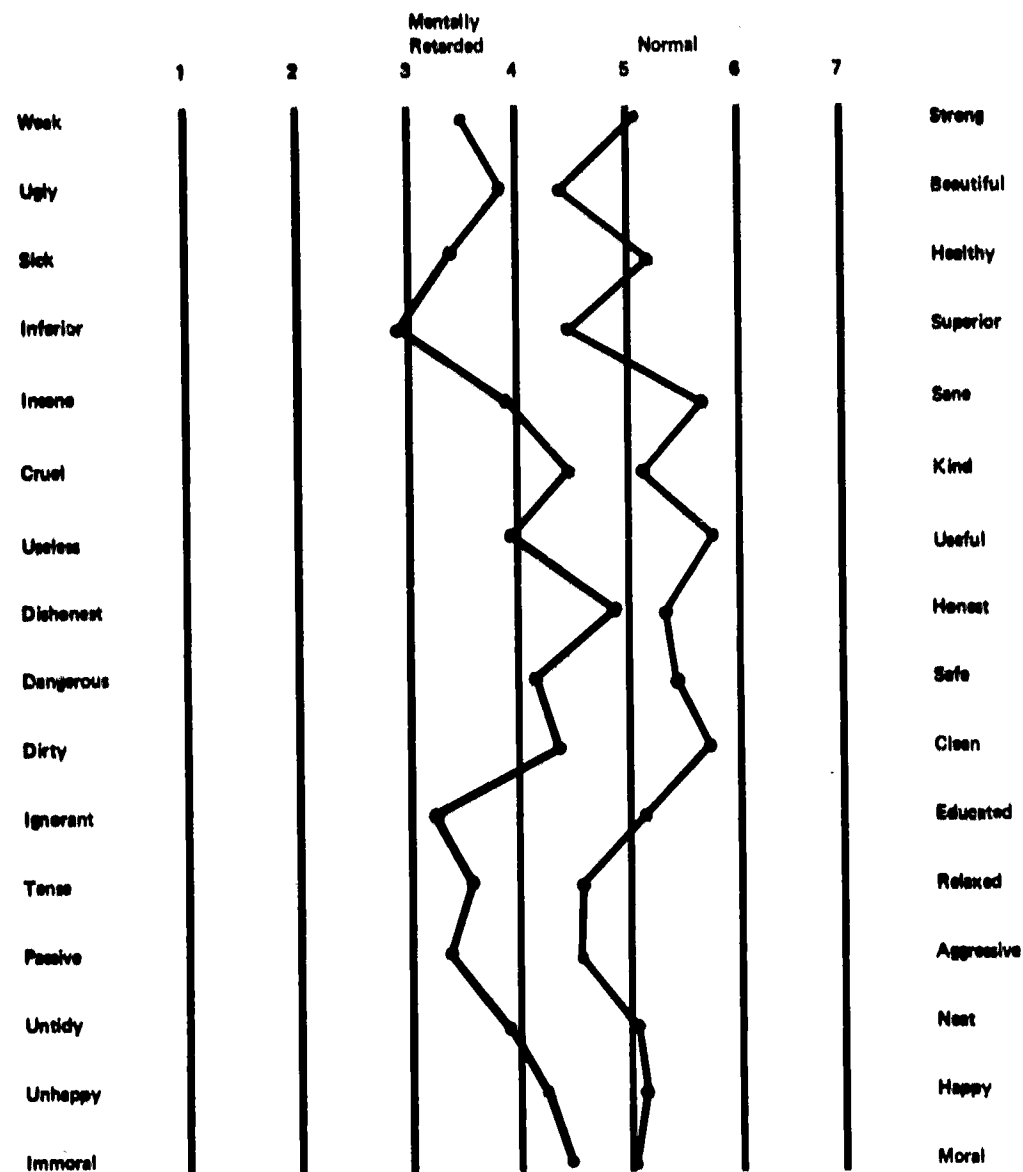
TABLE 19
Semantic Differential Normal Person (N = 1,515)

<i>Response</i>	<i>N</i>	<i>Percent</i>
Child	69	4.6
Adult	924	61.0
Both	164	10.8
No one in particular	252	16.6
Don't know	2	.1
Didn't answer	20	1.4
<i>Response</i>	<i>N</i>	<i>Percent</i>
Male	292	19.3
Female	87	5.7
Both	554	36.6
No one in particular	472	31.2
Didn't answer	21	1.6
Don't know	4	.3

TABLE 20
Semantic Differential Mentally Retarded Person (N = 1,515)

<i>Response</i>	<i>N</i>	<i>Percent</i>
Child	535	35.3
Adult	396	26.2
Both	242	16.0
No one in particular	224	14.8
Don't know	4	.3
Didn't answer	29	1.9
<i>Response</i>	<i>N</i>	<i>Percent</i>
Male	310	20.5
Female	128	8.4
Both	556	36.7
No one in particular	401	26.5
Don't know	5	.3
Didn't answer	31	2.1

Figure 1. Semantic Differential for Total Population



When respondents were finished with the semantic differential for a normal person, the same material and questions were presented in terms of the mentally retarded person (Table 21). It is of interest to note that the image of the retarded person favored a child. When sex was specified, males outnumbered females slightly better than 2 to 1. The major obvious difference in image was reflected in terms of thinking about a normal adult versus a retarded child.

Figure 1 presents the composite scoring on the semantic differential. Analysis of these data indicated significance at the .01 level or greater in all cases.

Acquaintance with a Retarded Person

In response to a question regarding acquaintance with a retarded person, 77 percent of the sample (1,167) stated that they knew a person whom they thought to be retarded. The relationship of this person is given in Table 21.

TABLE 21
Identification of Acquaintance Thought to Be Retarded (N = 1,167)

<i>Response</i>	<i>N</i>	<i>Percent</i>
Member of immediate family	58	3.8
Relative	181	11.0
Someone in neighborhood	379	25.0
Friend of family	253	16.7
Person at work or related to person at work	73	4.8
Casual acquaintance	203	13.4
Other	67	4.4

Table 22 gives additional information on the person as indicated by the respondents.

TABLE 22
Information Regarding Retarded Acquaintance (N = 1,167)

<i>Characteristics of retarded person</i>	<i>N</i>	<i>Percent</i>
Sex		
Male	727	48.0
Female	398	26.3
No response	42	2.8
Residence		
Home	955	63.0
Institution	155	10.2
Don't know	37	2.4
No response	20	1.3
Did person attend special class?		
Yes	495	32.7
No	449	29.6
Don't know	210	13.9
No response	13	.9
Did special class help? (N = 495)		
Yes	371	24.5
No	39	2.6
Don't know	83	5.5
No response	2	1.1

- III -

ANALYSIS OF DATA BY INDEPENDENT VARIABLES

TABLE 23
Profile of Sample Population on 11 Variables (N = 1,515)

<i>Variable</i>	<i>Total Sample</i>		<i>Respondents who never heard of mental retardation</i>	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
I. Sex				
Male	735	48.5	46	3.0
Female	780	51.5	38	2.5
II. Age (years)				
27 and under	206	13.5	7	.5
28-32	159	10.4	11	.7
33-37	150	9.9	6	.4
38-42	158	10.4	3	.2
43-47	160	10.5	5	.3
48-52	132	8.7	5	.3
53-57	121	7.9	6	.4
58-67	215	14.1	6	.4
67+	206	13.5	27	1.8
Refused or didn't answer	8	.5	2	.1
III. Education				
No school—4 years	71	4.6	25	1.7
5-7 years	121	8.0	20	1.4
8 years	171	11.3	14	.9
1-3 years high school	317	20.9	14	.9
Completed high school	423	27.9	9	.6
Some college	248	16.4	5	.3
Completed college	79	5.2	1	.1
Graduate or professional school	85	5.6	1	.1

TABLE 23 cont'd
Profile of Sample Population on 11 Variables

Variable	Total Sample		Respondents who never heard of mental retardation	
	N	Percent	N	Percent
IV. Occupation				
Professional	187	12.4	0	0
Farmers and farm managers	47	3.1	1	.1
Managers except farm	133	8.8	2	.1
Clerical and kindred workers	264	17.4	5	.3
Sales workers	71	4.7	2	.1
Craftsmen	190	12.5	9	.6
Operatives	207	13.7	13	.9
Service workers	206	13.6	21	.4
Laborers	65	4.3	16	1.1
Not established	145	9.5	15	1.0
V. Current status				
Fulltime work	665	44	21	1.4
Housekeeping	470	31	29	1.9
Retired	191	13	13	.9
Other	189	12	21	1.3
VI. Total family income				
Refused/no response	38	2.5	2	.1
\$2999 and under	272	18.0	38	2.5
\$3000-3999	113	7.5	15	1.0
\$4000-4999	134	8.8	7	.5
\$5000-5999	150	9.9	8	.5
\$6000-6999	144	9.5	6	.4
\$7000-7999	137	9.0	2	.1
\$8000-8999	201	13.3	3	.2
\$10,000-14,999	222	14.7	2	.1
\$15,000+	104	6.9	1	.1
VII. Race				
Caucasian	1303	86.0	56	3.6
Negro	201	13.3	28	1.9
Other	11	.7	0	.0
VIII. Marital status				
Married	1199	79.1	53	3.5
Widowed	142	9.3	16	1.0
Divorced or separated	63	4.1	6	.4
Single	111	7.3	9	.6

TABLE 23 cont'd
Profile of Sample Population on 11 Variables

Variable	Total Sample		Respondents who never heard of mental retardation	
	N	Percent	N	Percent
IX. Number of children				
None	178	11.7	13	.9
1	225	14.9	23	1.5
2	356	23.5	12	.8
3	251	16.6	10	.7
4	150	9.9	7	.5
5+	207	13.6	8	.6
Not applicable or not answered	148	9.7	11	.7
X. Demography				
10 largest metropolitan areas	369	24.4	12	.7
Other metropolitan areas	617	40.7	37	2.4
Counties with towns over 10,000	248	16.4	21	1.3
Counties with no towns over 10,000	281	18.5	14	.9
XI. Geography				
New England	84	5.5	2	.1
Middle Atlantic	284	18.7	16	1.0
East-North Central	294	19.4	17	1.1
West-North Central	132	8.7	4	.2
South Atlantic	218	14.4	9	.6
Southeast	82	5.4	11	.7
Southwest	181	11.9	16	1.0
Mountain	50	3.3	0	.0
Pacific	190	12.5	9	.6
XII. Religion				
Protestant	1010	66.7	59	3.8
Roman Catholic	386	25.5	21	1.3
Jewish	46	3.0	1	.1
Other	30	2.0	2	.1
None or not answered	43	2.8	1	.1

Analysis of Population Profile

Analysis of the population profile for the sample group ($N = 1,431$) and for the respondents who never heard of mental retardation ($N = 84$) disclosed differences significant at the .01 level for the variables of age, education, occupation, income, race, marital status, and

number of children. Differences significant at the .05 level were evidenced for the variable of geography. No significant differences were found for the variables of sex, demography, and religion.

Variable: Sex

Sample Distribution

The sample distribution for the variable sex was 689 males and 742 females.

Sources of Information about Mental Retardation

Table 3 presented data on the number of people who had heard of mental retardation in the past few months and the sources of this information. No statistical significance was evidenced by the sex variable.

Incidence of Mental Retardation

Estimates of the incidence of various disability areas appeared in Table 4. Statistical significance (.01) between male and female responses was found when analyzing the area of mental retardation. Other disabilities were not analyzed.

Causes of Mental Retardation

Statistical significance (.01) was found when causes of mental retardation (Table 5) were analyzed by the sex variable. As might be expected, female respondents were more cognizant of prenatal factors and birth injury as possible causes of mental retardation.

Prevention of Mental Retardation

Statistical significance (.05) was found between male and female responses to the question Can mental retardation be prevented? When the stated ways of preventing mental retardation were investigated (Table 6), significance was found at the .01 level with women being more sensitive to prenatal care, obstetrics, and nutrition.

"Social Worth" of the Retarded

No significance was found between the sexes in responses on the perceived social worth of retarded persons (Table 7).

Participation in Various Activities

Analysis of Table 8 showed statistical significance between male and female responses on the questions of whether the mentally retarded should be allowed to go downtown alone (.05), use public beaches

and/or playgrounds (.05), drink liquor (.01), drive a car (.01), and vote (.01).

In each of the aforementioned, it appeared that men were more willing to allow the retarded to participate in various functions, while women were much more hesitant or conservative.

Identifying and Ranking Services for the Retarded

There was no significant difference between male and female responses in the identifying and ranking of various services for the retarded (Tables 10 and 11).

Knowledge of Groups Working to Help the Retarded

Responses to questions involving knowledge of and participation in groups working to help the retarded showed no significant differences between men and women.

Grouping the Mentally Retarded

In grouping the retarded on various opinion statements (Table 14), significant differences in responses between men and women were found when they were indicating the proportion of mentally retarded persons who look differently (.01), are mentally ill or insane (.01), should be cared for at home (.01), can be self supporting (.01), and cannot learn to do anything for themselves (.05).

Miscellaneous Statements about the Retarded

Table 15 displayed the extent of respondent agreement on miscellaneous statements regarding the retarded; significant differences were found on the following statements when analyzed by the sex variable: The retarded have a right to public education (.01), a mentally retarded person living in my neighborhood would tend to lower property values (.01), programs for the retarded are too expensive in relation to what the retarded gain (.01), and most parents of mentally retarded children can have other normal children (.01).

Rating the Retarded on Ability to Perform Various Functions

Significant differences in responses between males and females were found in grouping the retarded on their ability to perform various functions (Table 16). These differences were evidenced in ranking the proportion of retarded persons who could learn to add and subtract (.01), learn to use public transportation (.01), learn to drive a car (.01), and have a regular job (.05). In all of the aforementioned categories, women were more conservative than men.

"Cures" for Mental Retardation

No significant differences in responses between men and women were found relative to the question Can mental retardation be cured?

Semantic Differential

Figure 1 graphically presented responses on word pairs in the semantic differential. In all cases, analysis indicated that each sex scored the mentally retarded significantly lower (.01) than they scored a normal person.

After ranking the normal person on the semantic differential, respondents were asked to indicate whether they were thinking of a child or adult, a male or female. Statistical significance (.01) was found in Table 19 in which respondents indicated the sex (image) of the person about whom they were thinking.

Table 20 indicated responses relevant to the semantic differential for a retarded person and whether the respondent was thinking about a child or adult, male or female. This table showed significance at the .01 level, with women tending to think in terms of children and females.

Respondents' Acquaintance with a Retarded Person

No significant difference in responses was found when considering whether respondents felt that they knew a mentally retarded person.

Variable: Age*Sample Distribution*

The sample distribution for the variable of age was as follows: ages 18-27, 199 respondents; 28-32, 148; 33-37, 144; 38-42, 155; 43-47, 155; 48-52, 127; 53-57, 115; 58-67, 203; and 67 and over, 179; refused or not answered, 6.

Sources of Information about Mental Retardation

The number of people who had heard about mental retardation in the past few months was essentially the same for groupings by age; however, analysis of this variable indicated significant differences (.01) in the sources of information.

Incidence of Mental Retardation

Significance at the .05 level was found when the estimate for the incidence of mental retardation was interpreted according to the age of the respondent.

Causes of Mental Retardation

When responses identifying causes of mental retardation were analyzed by age as a variable, significance was found at the .01 level. Younger respondents tended to specify more causes.

Prevention of Mental Retardation

When responses to the question of whether mental retardation can be prevented were analyzed by the age variable, significant differences at the .05 level were found.

"Social Worth" of the Retarded

When the perceived social worth of the retarded was analyzed, significant differences in responses were found (.01). Younger respondents reflected a more positive attitude in grouping the mentally retarded who would make good citizens and good parents.

Participation in Various Activities

Significant differences were evidenced on the questions whether the retarded should use public beaches and/or playgrounds (.05), drink liquor (.01), drive a car (.05), marry (.01), and have a family—children (.01). Younger respondents were much more permissive in each of the aforementioned areas than were their older counterparts.

Identifying and Ranking Services for the Retarded

Responses in ranking the second most important service for the retarded indicated significant differences at the .01 level when analyzed according to age. Younger respondents were more inclined to select education and/or research as first and second most important services.

Knowledge of Groups Working to Help the Retarded

Analysis of responses in this area indicated that younger respondents were significantly (.01) more familiar with groups working for the retarded than were older respondents. No significance was evidenced, however, in terms of participation in programs or drives.

Grouping the Mentally Retarded

A significant difference was revealed in grouping the retarded on various statements, such as the retarded look different (.01), are mentally ill or insane (.01), can live "normal" lives (.01), should be in institutions (.05), can have normal children (.01), can be self supporting (.05), and cannot learn to do anything for themselves (.01). Younger respondents had more accurate and positive attitudes than their older counterparts.

Miscellaneous Statements about the Retarded

The extent of respondent agreement on miscellaneous statements displayed significant differences when analyzed according to age. These statements were that mentally retarded never know they differ from other people (.01), a mentally retarded adult living in the neighborhood would tend to lower property values (.05), programs for the retarded are too expensive in relation to what the retarded gain from them (.01), a retarded youth should not expect to participate in teenage youth activities (.01), you can usually tell a retarded person by his looks (.01), and I would not want my child to attend a school that also has classes for retarded children (.01).

*Rating the Mentally Retarded on Ability to**Perform Various Functions*

The age variable produced significant differences in responses grouping the retarded on their ability in various roles or functions. In estimating the number of mentally retarded persons who can learn to add and subtract (.01), learn to use public transportation (.05), learn to drive a car (.01), learn to dance (.05), and have a regular job (.05), younger respondents were more positive about the abilities of a retarded person.

"Cures" for Mental Retardation

No significant difference was evidenced when the question "Can mental retardation be cured?" was analyzed by the variable of age.

Semantic Differential

Figure 1 graphically presented responses on word pairs in the semantic differential. Analysis by the total spread of the age variable indicated that all groupings ranked the mentally retarded significantly lower (.01) than they ranked a normal person. Practical considerations prevented analysis of these scores by each category within the age variable.

Relative to the semantic differential for both the normal and the retarded, there were no significant differences by age in replies indicating whether the respondent was thinking of a child or adult, a male, or female.

Respondents' Acquaintance with a Retarded Person

A higher percentage of older respondents indicated that they knew a mentally retarded person. Significance at the .05 level was found.

Variable: Education***Sample Distribution***

The sample distribution for the variable of education was as follows: no school through 4 years, 46; 5 to 7 years, 101; 8 years, 162; one to 3 years of high school, 303; completed high school, 414; some college, 243; completed college, 78; and graduate or professional school, 84.

Sources of Information about Mental Retardation . .

When analyzed by the education variable, statistical significance was evidenced in the number of respondents who had heard about mental retardation in the past few months (.01) and who identified the source of this information (.01). In virtually all instances, respondents with more education were better informed and indicated a media with greater frequency. The only notable exception to this was in the number of respondents naming television as a source of information.

Incidence of Mental Retardation

No significant difference in respondents' estimates for the incidence of mental retardation was found when analyzed by the variable of education.

Causes of Mental Retardation

There were no significant differences in responses identifying causes of mental retardation when analyzed by the education variable.

Prevention of Mental Retardation

Analysis by the amount of the respondents' education displayed significant differences concerning prevention of mental retardation (.01) and the identification of preventative measures. Respondents with more education favored possible prevention of mental retardation and reflected more sophistication in identifying means by which it can be prevented.

"Social Worth" of the Mentally Retarded

The amount of the respondents' education significantly affected antistatistical significance in their grouping of the mentally retarded in various social roles.

Participation in Various Roles and Functions

Attitudes towards various roles, functions, and activities for the retarded were affected by the respondents' level of education. Significant differences were manifested in answers indicating whether the

retarded should go downtown alone (.05), use public beaches or playgrounds (.05), and drink liquor (.05). Respondents with more education reflected a more liberal attitude.

Identifying and Ranking Services for the Retarded.

When ranking the most important service for the mentally retarded, respondents with less than a high school education were inordinately represented in the choice of foster homes and day care centers. This was significant at .05 level.

Knowledge of Groups Working to Help the Retarded

The amount of the respondents' education significantly affected answers concerning knowledge of associations working for the retarded (.01) and participation in activities to help the retarded (.01). More educated people had greater acquaintance with groups serving the retarded as well as more personal participation in drives or activities.

Grouping the Mentally Retarded

Statistical significance at the .01 level was evidenced when the variable of education was applied to responses grouping the proportion of mentally retarded persons who could live "normal" lives. Respondents with less education reflected more polarization in responses.

Miscellaneous Statements about the Retarded

Agreement on various statements about the retarded was affected by the level of respondents' education. Significant differences were found on these statements: the mentally retarded never know they differ from other people (.01), a retarded youth should not expect to participate in teenage community activities (.01), you can always tell a retarded person by his looks (.01), and I would not want my child to attend a school that also had classes for retarded children (.01). Respondents with higher education reflected a more positive and/or accurate response.

Rating the Retarded on Ability to Perform Various Functions

In grouping the retarded on their ability to perform various functions, the level of respondents' education was a factor. Significant differences were found in grouping the proportion of the retarded who can learn to read and write (.05), learn to use public transportation (.01), learn to do simple sewing (.05), learn to drive a car (.01), and learn

to hold a regular job (.01). More education reflected greater optimism and positive attitudes towards the abilities and potential of the retarded.

"Cures" for Mental Retardation

The level of respondents' education was not a significant factor in answering the question, can mental retardation be cured?

Semantic Differential

Figure 1 graphically presented responses on word pairs in the semantic differential. Analysis by the total spread of the education variable indicated that virtually all groupings ranked the retarded very significantly lower (.01) than the normal person. The only exceptions to the .01 level were manifested by respondents with zero to 4 years of education on the following pairs: cruel-kind (.05), dishonest-honest (.05), and immoral-moral (.05), and by respondents who had completed college on these pairs: cruel-kind (NS), dishonest-honest (NS), tense-relaxed (.05), and unhappy-happy (.05).

Responses indicating whether the subject was thinking about a child or adult when answering the "normal" semantic differential were significantly different at the .05 level. No significant differences in responses were evidenced when the same question was applied to the retarded. The level of respondent education did not significantly affect answers indicating whether subjects were thinking of a male or female on either of the semantic differentials.

Respondents' Acquaintance with a Retarded Person

Significant differences (.05) were found when the variable of education was applied to answers indicating whether the subjects felt that they knew a retarded person. People with more education gave a greater number of affirmative responses.

Variable: Occupation

Sample Distribution

The sample distribution for the variable of occupation was as follows: professional, 187; farmers and farm managers, 46; managers other than farm, 131; clerical and kindred workers, 259; sales workers, 69; craftsmen, 181; operatives 194; service workers, 185; laborers, 49; not established, 130. This data was based upon respondents having worked in the stated capacity for one year or more.

Sources of Information about Mental Retardation

Answers indicating whether respondents had heard or read about mental retardation in the past few months differed significantly (.01) when analyzed by the occupation variable. Application of this variable to responses identifying sources of information about mental retardation also disclosed significance (.01). Respondents having occupations involving leadership and/or extensive training were more familiar with written information.

Incidence of Mental Retardation

No significant differences were evidenced when estimates of incidence of mental retardation were analyzed by the occupation variable.

Causes of Mental Retardation

When the occupation variable was applied to responses identifying causes, no significant differences were found.

Prevention of Mental Retardation

Significant differences (.01) in answer to the question Can mental retardation be prevented? were displayed when this was analyzed by occupation of respondents, with professional and managerial personnel answering more affirmatively. Identification of means by which retardation can be prevented, however, showed no significant differences for this variable.

"Social Worth" of the Mentally Retarded

Respondents' occupation was a significant factor (.01) only in grouping the proportion of mentally retarded persons who would make good friends. The central grouping of occupations, consisting of those other than professional and service-labor, tended to be more conservative in this aspect.

Participation in Various Roles and Functions

Answers reflecting significant differences in attitudes about whether the retarded should vote (.05) and should marry (.01) were displayed when these questions were analyzed by the occupation of respondents. Professional and managerial groups were more negatively oriented than other groups.

Identifying and Ranking Services for the Retarded

Analysis by the occupation variable showed a significant difference (.05) in responses identifying the most important service for the re-

tarded. Professional, managerial, and skilled groups favored research while less skilled and trained groups were more oriented toward education and services.

Knowledge of Groups Working to Help the Retarded

Occupation was a significant factor (.01) in respondents' familiarity with groups working to help the retarded. Professional, managerial, and skilled respondents indicated greater acquaintance with these organizations. The variable of occupation, however, displayed no significance when applied to the question of the respondents' participation in programs or drives for the retarded.

Grouping the Mentally Retarded

In grouping the retarded on various statements, respondents answered significantly different by occupation in their responses related to the proportion of the retarded who look different. Labor and less skilled occupations responded more affirmatively in this category.

Miscellaneous Statements About the Mentally Retarded

Responses showing the rate of agreement to the statement, You can usually tell a mentally retarded person by his looks, differed significantly (.01) when analyzed by the occupation variable. Service, labor, and lesser skilled groups responded more affirmatively to this statement.

Rating the Retarded on Ability to Perform Various Functions

The occupation of respondents was a significant factor in grouping the proportion of retarded persons who can learn to use public transportation (.05) and to hold a regular job (.05). Professional and skilled occupations were more positive about the retarded in various functions.

"Cures" for Mental Retardation

No significant differences were found when the question Can mental retardation be cured? was analyzed by the occupation variable.

Semantic Differential

Figure 1 graphically presented responses on word pairs in the semantic differential. Analysis by the total spread of the occupation variable indicated that virtually all groupings ranked the mentally retarded significantly lower (.01) than the normal person. The only exceptions were manifested by farmers and farm managers on tense-relaxed (NS);

by sales workers on ugly-beautiful (.05), cruel-kind (NS), and immoral-moral (NS); and by laborers on ugly-beautiful (.05), cruel-kind (.05), dishonest-honest (NS), and immoral-moral (.05).

Relevant to the "normal" semantic differential, responses differed significantly (.01) in indicating whether the subject was thinking about a child or adult when this area was investigated using the variable of occupation. No significant differences in responses were evidenced when the same question was applied for mental retardation.

The occupation variable was not a significant factor in responses indicating whether the subjects were thinking of a male or female on either of the semantic differentials.

Respondents' Acquaintance with a Mentally Retarded Person

Significance (.05) was found when the variable of occupation was applied to answers indicating whether the subjects felt that they knew a mentally retarded person. Professional, managerial, and skilled groups responded affirmatively more often than other groups.

Variable: Income

Sample Distribution

The sample distribution for the variable of income was as follows: \$2999 and under, 234; \$3000-3999, 98; \$4000-4999, 127; \$5000-5999, 142; \$6000-6999, 138; \$7000-7999, 135; \$8000-9999, 198; \$10,000-14,999, 220; \$15,000 or over, 103; no answer, 36.

Sources of Information About Mental Retardation

Income was a significant factor in affecting answers to the question of whether or not the subject had heard about mental retardation in the past few months (.01) as well as in responses indicating the source(s) of information (.01). Respondents with greater income generally identified printed media and personal and/or oral communication to a greater extent than did their counterparts with lower income. Radio and television were identified most frequently by subjects in the lower income brackets.

Incidence of Mental Retardation

Responses estimating the incidence of mental retardation disclosed no significant differences when analyzed by the income variable.

Causes of Mental Retardation

Significance at the .05 level was evidenced when responses identifying causes of mental retardation were analyzed by the level of the subjects'

income. Lower income groups identified prenatal factors with greater frequency than did higher income respondents.

Prevention of Mental Retardation

Significant differences at the .01 level were found both in responses to the question Can mental retardation be prevented? and in identification of means by which mental retardation could be prevented. Higher income groups were more inclined to respond that mental retardation could be prevented. Higher income groups were also more likely to specify the PKU test as a means of preventing mental retardation.

"Social Worth" of the Mentally Retarded

The level of respondents' incomes had no significant impact upon the manner in which they grouped the mentally retarded on various social roles.

Participation in Various Roles

Responses indicating differences in attitudes were found when statements regarding certain roles for the mentally retarded were analyzed by the income variable. Significance was found in attitudes concerning whether the mentally retarded should drink liquor (.01), drive a car (.01), marry (.01) and have a family (.01) with higher income levels tending to reflect greater leniency or permissiveness.

Identifying/Ranking Services for the Mentally Retarded

No significant differences in identifying or ranking services for the mentally retarded were found when answers in this area were analyzed by the variable of income.

Knowledge of Groups Working to Help the Mentally Retarded

The level of respondents' income significantly (.01) affected answers reflecting knowledge about groups working to help the mentally retarded, with higher income respondents displaying more familiarity with these groups. However, no significant differences were mirrored in responses indicating personal participation in programs or drives to help the mentally retarded.

Grouping the Mentally Retarded

When grouping the mentally retarded on various statements, the level of respondent income was apparently a factor. Significant differences were found in the proportion of the mentally retarded who are mentally ill or insane (.05), can live "normal" lives (.05), should be

in institutions (.05), can have normal children (.01), and can be self supporting (.01). In general, upper income groups tended to be more sophisticated and realistic in their responses.

Miscellaneous Statements About the Mentally Retarded

Respondent opinion about miscellaneous statements differed significantly on the following statements when analyzed by the income variable: the mentally retarded never know that they differ from other people (.05), a retarded youth should not expect to participate in teenage community activities (.05), and you can usually tell a retarded person by his looks/appearance (.01).

Rating the Mentally Retarded on Ability to Perform Various Functions

When subjects indicated the proportion of the mentally retarded who could perform various roles or activities, significant differences were found in grouping those who could learn to use public transportation (.01), learn to do simple sewing (.01), learn to drive a car (.01), and learn to dance (.01). Respondents in higher income brackets displayed a more positive outlook concerning the potential of mentally retarded persons in the aforementioned activities.

"Cures" for Mental Retardation

No significant difference was evidenced in answers to the question "Can mental retardation be cured?" when analyzed by the variable of respondent income.

Semantic Differential

Analysis by the total spread of the income variable indicated that all groups ranked the mentally retarded significantly lower (.01) than they ranked a normal person.

When answering questions related to the "normal" semantic differential, significant differences in responses (.01) were evidenced in terms of whether the subject was thinking of a child or adult. No significant differences in responses were displayed when the same question was applied to the semantic differential for the mentally retarded. Also, relative to both semantic differentials, the amount of respondents' income did not significantly affect answers indicating whether subjects were thinking of a male or female.

Respondents' Acquaintance with a Mentally Retarded Person

No significant differences in responses were found when the income variable was applied to analysis of the subjects' acquaintance with a mentally retarded person.

Variable: Race*Sample Distribution*

The sample distribution for the variable race was Caucasian, 1247; Negro, 173; Oriental, 3; Other/Not Answered, 8. In a realistic sense, the dichotomy of Caucasian and Negro virtually represents the total population.

Sources of Information about Mental Retardation

Responses indicating whether or not subjects had heard about mental retardation in the past few months differed significantly (.01) when analyzed by the race variable, with Caucasians answering affirmatively more often. No significant differences, however, were manifested when respondents indicated sources of their information about mental retardation.

Incidence of Mental Retardation

When the race variable was applied to estimates indicating the incidence of mental retardation, statistical significance in responses at the .01 level was manifested. Both races, however, were erroneously low in estimates.

Causes of Mental Retardation

There were no significant differences in responses identifying causes of mental retardation when this area was analyzed by the race variable.

Prevention of Mental Retardation

No significant differences were evidenced in responses to questions concerning the prevention of mental retardation and the identification of means by which mental retardation could be prevented.

"Social Worth" of the Mentally Retarded

Differences in responses significant at the .01 level were found when respondents estimated the number of mentally retarded persons who would make good employees. Proportionately, Caucasians indicated a more positive response to this question.

Participation in Various Roles

The race variable affected responses indicating attitudes towards various roles for the mentally retarded. Significant differences were evidenced by answers to questions of whether the mentally retarded should go downtown alone (.05), marry (.01), and have a family (children) (.05). Members of the Caucasian race were more willing, proportion-

ately, to allow the mentally retarded to go downtown alone; however, the Negro subjects were proportionately more lenient in attitudes about marrying and raising a family.

Identifying/Ranking Services for the Mentally Retarded

No significant differences were found in identifying/ranking the most important services for the mentally retarded when answers were analyzed by the race of the respondents.

Knowledge of Groups Working to Help the Mentally Retarded

The race of respondents was a significant factor (.05) in answers indicating whether the subject knew of any groups working for the mentally retarded, with Caucasians being more aware, proportionately, than Negroes. There were no significant differences, however, in answers concerning the subject's participation in programs or drives to help the mentally retarded.

Grouping the Mentally Retarded

In grouping the mentally retarded on various statements, use of the race variable revealed significantly different responses about the proportion of mentally retarded who are mentally ill or insane (.05), can live "normal" lives (.05), should be in institutions (.01), should be cared for at home (.01), can have normal children (.05), can be self supporting (.01), and cannot learn to do anything for themselves (.01).

Proportionately, the Negro subjects' responses indicated that more mentally retarded persons were mentally ill or insane, should be in institutions, and could never learn to do anything for themselves. Answers by Caucasian respondents, proportionately, indicated that more of the mentally retarded could live normal lives, could have normal children, and should be cared for at home.

Miscellaneous Statements about the Mentally Retarded

Respondents' agreement upon various statements about the mentally retarded were significantly affected by the race variable on the following: mentally retarded children have a right to public education (.01), a mentally retarded adult living in the neighborhood would tend to lower property values (.01), parents should allow their normal child to play with a retarded child (.01), and I would not want my child to attend a school that also has classes for retarded children (.01). Caucasian respondents tended to be more liberal than Negro respondents.

Rating the Mentally Retarded on Ability to Perform Various Functions

The race variable was a significant factor in responses estimating the ability of the mentally retarded to perform various functions. Statistical significance was evidenced in answers indicating the proportion of the mentally retarded who can learn to add and subtract (.01), learn to feed themselves (.01), learn to dress themselves (.01), learn to use public transportation (.01), learn to do simple sewing (.01), and learn to hold a regular job (.01). In all of the statements concerning abilities, more Caucasian respondents, proportionately, indicated that the retarded were capable of doing the stated tasks, while Negro respondents, proportionately, tended to be more pessimistic.

"Cures" for Mental Retardation

Answers to the question "Can mental retardation be cured?" differed significantly (.01) when analyzed by the race variable. Responses indicated that, proportionately, Caucasians gave a greater negative response than Negroes.

Semantic Differential

Figure 1 graphically presented responses on word pairs in the semantic differential. In all cases, analysis indicated that each race scored the mentally retarded significantly lower (.01) than they scored a normal person. Answers indicating whether the subject were thinking about a child or adult when answering the "normal" semantic differential were significant at the .05 level. No significant differences in responses were evidenced when the same question was applied to the mentally retarded. Also, relative to the semantic differential for both the normal and the mentally retarded, the race of the respondent did not significantly affect answers indicating whether the subject was thinking of a male or a female.

Respondents' Acquaintance with a Mentally Retarded Person

When the race variable was applied to answers indicating whether the subjects felt that they knew a mentally retarded person, significance (.01) was evidenced, with Caucasians answering affirmatively more often.

Variable: Marital Status*Sample Distribution*

The sample distribution for the marital status variable was Married, 1146; Widowed, 126; Divorced/Separated, 57; Single, 102.

Sources of Information about the Mentally Retarded

When the marital status variable was applied to answers indicating whether respondents had heard about mental retardation in the past few months, significant differences at the .05 level were found concerning sources of information about mental retardation, with married respondents differing slightly from the other groups.

Incidence of Mental Retardation

No significant differences in estimates for the incidence of mental retardation were found when analyzed by the marital status of respondents.

Causes of Mental Retardation

Responses identifying causes of mental retardation disclosed no significant differences when analyzed by the marital status of respondents.

Prevention of Mental Retardation

Analysis by the marital status of the subjects found no significant differences in answer to the question "Can mental retardation be prevented?" or in identification of means by which mental retardation could be prevented.

"Social Worth" of the Mentally Retarded

The marital status of respondents significantly (.05) affected answers indicating the number of mentally retarded persons who would make good parents. Married respondents tended to be more pessimistic.

Participation in Various Roles

Attitudes towards various roles for the mentally retarded were affected by the marital status of the respondents. Significant differences were obtained for answers indicating whether the mentally retarded should drink liquor (.05), drive a car (.01), marry (.01), and have a family (children) (.01).

Married respondents were more conservative about allowing the mentally retarded to participate in the functions mentioned. However, a disproportionate number of "don't know" answers came from single, separated, or divorced respondents.

Identifying/Ranking Services for the Mentally Retarded

When ranking the second most important service for the mentally retarded, analysis by the marital status of subjects showed significant

(.05) differences in responses related to foster homes and parent counseling. Married respondents mentioned these services more frequently.

Knowledge of Groups Working to Help the Mentally Retarded

The marital status of respondents significantly (.05) affected their acquaintance with various groups working to help the mentally retarded. No differences, however, were manifested in relation to respondent participation in drives and/or activities to help the mentally retarded when explored by the same variable.

Grouping the Mentally Retarded

Analysis by marital status indicated significant differences in grouping the mentally retarded on various statements. These differences were manifested in answers indicating the proportion of the mentally retarded who look different (.01), are mentally ill or insane (.05), should be in institutions (.05), can have normal children (.01), should be cared for at home (.05), can be self supporting (.01), and cannot learn to do anything for themselves (.05).

Miscellaneous Statements about the Mentally Retarded

The amount of respondent agreement on various statements concerning the mentally retarded was significantly affected by the variable of marital status. Significant differences were found in responses to the following statements: Mentally retarded persons never know they differ from other people (.01), Mentally retarded children have a right to public education (.05), Programs for the mentally retarded are too expensive in relation to what the retarded person gains from them (.05), Most people feel uncomfortable in the presence of a mentally retarded person (.05), and I would not want my child to attend a school that also has classes for retarded children (.05). Married respondents tended to be more conservative.

Rating the Mentally Retarded on Ability to Perform Various Functions

Marital status had a significant effect on respondents' estimates of the number of mentally retarded persons who could learn to use public transportation (.01) and the number of the retarded who could learn to drive a car (.05). Married respondents were less affirmative in this respect.

"Cures" for Mental Retardation

The marital status of respondents had no impact upon answers to the question "Can mental retardation be cured?"

Semantic Differential

Figure 1 graphically presented responses on word pairs in the semantic differential. Analysis by the total spread of the marital status variable indicates that virtually all groupings ranked the mentally retarded significantly lower (.01) than they ranked the "normal" person. The only exceptions were manifested by respondents who were single or separated/divorced on the following: ugly-beautiful (NS), cruel-kind (.05), dishonest-honest (NS), tense-relaxed (NS), and immoral-moral (NS). On the "normal" semantic differential, significant differences were manifested in statements indicating whether the respondent was thinking of a child or adult (.05), a male or female (.01). No differences in responses were found when these same questions were analyzed for the "mentally retarded" semantic differential.

Respondents' Acquaintance with a Mentally Retarded Person

No significant differences in answers concerning the respondents' acquaintance with a mentally retarded person was evidenced when analyzed by the variable of marital status.

Variable: Number of Children

Sample Distribution

The sample distribution for the variable number of children was None, 165; One, 202; Two, 344; Three, 241; Four, 143; Five and more, 199; Not applicable or not answered, 137.

Sources of Information about Mental Retardation

Answers stating whether respondents had heard about mental retardation in the past few months did not differ significantly when analyzed by the number of children respondents had. Sources of respondent information about mental retardation did not differ significantly either, when analyzed by the same variable.

Incidence of Mental Retardation

When analyzed by this variable, respondent estimates for the number of mentally retarded persons per 1,000 population did not differ significantly.

Causes of Mental Retardation

Analysis indicated that the number of offspring had no significant impact upon respondents' identification of factors causing mental retardation.

Prevention of Mental Retardation

The children variable had no significant impact upon responses indicating whether mental retardation could be prevented, nor in the identification of means by which mental retardation could be prevented.

"Social Worth" of the Mentally Retarded

No significant differences were evidenced in responses relevant to the perceived social worth of the mentally retarded.

Participation in Various Roles

This variable did not significantly affect responses to a series of statements revealing attitudes toward various roles for the mentally retarded.

Identifying/Ranking Services for the Mentally Retarded

No significant differences were evidenced in the way subjects identified /ranked the most important services for the mentally retarded when the area was assessed by this variable.

Knowledge of Groups Working to Help the Mentally Retarded

This variable elicited no significant differences in answers indicating respondent's familiarity with groups working to help the mentally retarded. The same was true in answers concerning personal participation in programs or drives for the same purpose.

Grouping the Mentally Retarded

Responses grouping the mentally retarded on various statements were not affected significantly when analyzed by the children variable.

Miscellaneous Statements About the Mentally Retarded

Answers concerning the extent of respondents' agreement on miscellaneous statements about the mentally retarded differed significantly (.05) only on "a mentally retarded person's living in the neighborhood would tend to lower the property values" when this variable was applied. Proportionately more respondents without children tended to agree with this statement.

Rating the Mentally Retarded on Ability to Perform Various Functions

When the children variable was used to assess responses indicating the proportion of the mentally retarded who could perform various functions, significant differences were disclosed on the following: learn to

dance (.01) and have a regular job (.05). Respondents without children answered more affirmatively in the polar categories.

"Cures" for Mental Retardation

Answers to the question "Can mental retardation be cured?" were not significantly affected when analyzed by the children variable.

Semantic Differential

Figure 1 graphically presented responses on word pairs in the semantic differential. Analysis by the total spread of this variable indicates that virtually all groupings ranked the mentally retarded significantly lower than the "normal" person. The only exception was manifested by respondents with five or more children on the word pair "honest-dishonest." In this case, no statistical significance was found.

For both the "normal" semantic differential and the "mentally retarded" semantic differential, no significant differences were evidenced when the children variable was applied to the question indicating whether the respondent was thinking about a child or adult, a male or female.

Respondents' Acquaintance with a Mentally Retarded Person

Significance at the .05 level was found when responses reflecting the subjects' acquaintance with a mentally retarded person were analyzed by the children variable. Respondents without children indicated, proportionately, less familiarity/acquaintance with a mentally retarded person.

Variable: Demography

Sample Distribution

The sample distribution for the demography variable was: ten largest metropolitan areas, 357; other metropolitan areas, 580; counties with towns over 10,000, 227; counties with no towns over 10,000, 267.

Sources of Information about Mental Retardation

Answers to whether or not respondents had heard about mental retardation in the past few months differed significantly (.05) when analyzed by the demographic variable. Significant differences (.05) were also manifested when the respondents indicated sources of their information about mental retardation. The availability of and/or exposure to media appeared to be a key factor in responses.

Incidence of Mental Retardation

When estimates of the incidence of mental retardation were analyzed by the variable of demography, no significant differences were evidenced.

Causes of Mental Retardation

Differences in responses significant at the .01 level were found when subjects identified causes of mental retardation. Rural areas were somewhat less sophisticated in responses when compared to other groups. Large metropolitan areas also reflected this characteristic, but not so extensively.

Prevention of Mental Retardation

No significant differences were found in responses concerning the prevention of mental retardation and the identification of means by which mental retardation could be prevented when these areas were explored on a demographic basis.

"Social Worth" of the Mentally Retarded

When grouping the mentally retarded on series of social roles, significant differences in responses were evidenced on a demographic basis in the proportion of the mentally retarded who would make good friends (.05), parents (.01), and husbands/wives (.01). Smaller communities were more prone to indicate that the mentally retarded would make good friends; however, large metropolitan areas were more liberal in stating that the retarded would make good parents, husbands, or wives.

Participation in Various Roles

Demography affected responses indicating attitudes towards various roles for the mentally retarded. Significant differences were manifested in answers to the questions of whether the mentally retarded should use public beaches and/or playgrounds, (.05); drink liquor, (.01); vote, (.01); marry, (.01); and have a family (children) (.01). The largest metropolitan areas were most liberal in allowing the retarded to participate in the roles mentioned. Other metropolitan areas were also liberal; however, smaller communities and rural areas reflected a more conservative attitude.

Identifying/Ranking Services for the Mentally Retarded

Significant differences were found in ranking services for the mentally

retarded (.05) when responses to these questions were analyzed by demography. While all respondents tended to rank services alike, the largest metropolitan areas were more emphatic about research and education.

Knowledge of Groups Working to Help the Mentally Retarded

Demographic factors were not significant in answers indicating whether the respondent knew of various groups working to help the mentally retarded; nor were there any significant differences in responses concerning the subjects' direct participation in programs or drives to help the mentally retarded.

Grouping the Mentally Retarded

In grouping the mentally retarded on various statements, the demographic variable elicited significant differences in responses concerning the proportion of the mentally retarded who look differently (.01), are mentally ill or insane (.01), can live normal lives (.01), had mentally retarded parents (.05), and can have normal children (.05). In all of these cases, the "10 largest metropolitan areas" and "other metropolitan areas" reflected a more sophisticated or accurate level of responses than smaller communities and rural areas.

Miscellaneous Statements About the Mentally Retarded

The extent of respondent agreement on the following statements about the mentally retarded differed significantly when explored according to the demographic variable: A mentally retarded adult living in the neighborhood would tend to lower property values (.05), A mentally retarded youth should not expect to participate in teenage community activities (.05), You can usually tell a retarded person by his looks or appearance (.01), and Most people feel uncomfortable in the presence of a mentally retarded person (.05).

All responses reflected the same polarities; however, the extent of agreement varied. Rural areas and small communities had a higher ratio of respondents indicate that property values would be lowered by having a retarded person live in the neighborhood. These same areas, however, were more favorable in stating that a retarded youth should expect to participate in teenage community activities. The largest metropolitan areas differed significantly from the rural areas over the statement "You can usually tell a retarded person by his looks or appearance." Rural areas were in agreement with this statement, while the metropolitan areas differed. All groups indicated that

they felt uncomfortable in the presence of a mentally retarded person; however, the 10 largest metropolitan areas reflected a greater number of responses at each of the polarities.

Rating the Mentally Retarded on Ability to Perform Various Functions

Responses indicating the proportion of the mentally retarded who could learn to dance differed significantly (.01) when analyzed by the demographic variable. Although all areas were well represented in the central rankings, the largest metropolitan areas were more positive in the extreme ratings.

"Cures" for Mental Retardation

Significant (.01) differences were found when the responses to the question of whether mental retardation can be cured were analyzed by the demographic variable. All areas responded negatively; however, the rural areas were significantly more emphatic about it.

Semantic Differential

Figure 1 presented responses on word pairs in the semantic differential. In all cases, analysis indicated that each demographic unit scored the mentally retarded significantly lower (.01) than they ranked the normal person. On the "normal" semantic differential, significant differences were found in answers indicating whether the subject were thinking of a child or adult (.05), a male or female (.05). Metropolitan areas were more prone to think in terms of an adult male. On the "mentally retarded" semantic differential, answers indicating whether the subject was thinking about a child or adult differed significantly (.01) as did responses indicating whether the subject was thinking of a male or female (.05). In both cases, the metropolitan areas were more inclined to think of a male child than were the other areas.

Respondents' Acquaintance with a Mentally Retarded Person

When the demographic variable was applied to answers indicating whether the subjects felt they knew a mentally retarded person, significance at the .05 level was found. Rural areas were more affirmative in response to this question.

Variable: Geographic Areas

Sample Distribution

The sample distribution for the variable of geography was New Eng-

land, 82; Middle Atlantic, 268; East-North Central, 277; West-North Central, 128; South Atlantic, 209; Southeast, 71; Southwest, 165; Mountain, 50; Pacific, 181.

Sources of Information About Mental Retardation

Answers stating whether respondents had heard or read about mental retardation in the past few months differed significantly (.01) when analyzed by the geographic variable. The East-North Central states represented the lowest ratio of affirmative responses while the West-North Central states represented the highest ratio of affirmative answers. The balance of responses was somewhat more equitably distributed. The source of information about mental retardation also differed significantly (.01) when analyzed by the same variable.

Incidence of Mental Retardation

Significant (.05) differences in responses were found when estimates for the incidence of mental retardation were analyzed by the variable geography. All geographic areas were low in their estimations; however, Middle Atlantic states had the greatest deviance.

Causes of Mental Retardation

The geographic area of respondents was a significant (.05) factor in responses identifying causes of mental retardation, with the Middle Atlantic and Southeastern states naming fewer etiological factors.

Prevention of Mental Retardation

Geographic area was not a significant factor in responses identifying means of preventing mental retardation.

"Social Worth" of Mentally Retarded Persons

Significant differences (.01) were found when the geographic variable was applied to responses indicating the proportion of the mentally retarded who would make good employees. The Southeastern states were least optimistic about this possibility.

Participation in Various Roles and Functions

The geographic variable significantly affected responses reflecting attitudes about whether the mentally retarded should go downtown alone (.01), use public beaches and/or playgrounds (.01), drink liquor (.01), drive a car (.01), vote (.05), marry (.01), and have a family (children) (.01). The New England states were the only geographic area in favor of allowing the retarded to go downtown alone.

All other areas were opposed to this, with the Southeastern states most emphatic. All areas favored allowing the retarded to use public beaches and/or playgrounds, with the strongest affirmative position held by the New England states. Other geographic areas reflecting strong support for this factor were the Middle Atlantic and Pacific states.

All geographic areas were strongly opposed to allowing mentally retarded persons to drink liquor; however, the most overwhelming negative response came from the Southwestern states. Although all areas were in agreement that the retarded should not be allowed to drive, the New England states were most liberal in this respect while the Southwestern states indicated the strongest opposition. The Middle Atlantic states favored allowing the mentally retarded to vote. While all others opposed this, least opposition came from New England and Mountain states. The Middle Atlantic states were split over the question of allowing the retarded to marry. All other geographic areas opposed this to varying degrees. All areas were opposed to allowing the mentally retarded to have a family (children); however, the least opposition came from the Middle Atlantic states. (This is somewhat consonant with their position on marriage.)

Identifying/Ranking Services for the Mentally Retarded

The geographic area of subjects was not a significant factor in responses ranking the most important services for the mentally retarded.

Knowledge of Groups Working to Help the Mentally Retarded

The geographic area of respondents did not significantly affect answers indicating familiarity with groups working to help the mentally retarded or personal participation in programs or drives for the same purpose.

Grouping the Mentally Retarded

Responses grouping the mentally retarded on each of the following statements differed significantly when the geographic variable was applied: look differently (.05), can live normal lives (.01), should be in institutions (.05), and can be self supporting (.05). The South Atlantic, Southwestern, and Pacific states tended to respond more affirmatively about the mentally retarded "looking differently" than did the other geographic areas. Greater optimism about the mentally retarded's being able to "live normal lives" was expressed by the New

England and West-North Central states while greater pessimism was indicated by the Southeast.

The New England states, followed by the Middle Atlantic and East-North Central states, were less prone to (group for) institutional placement for the retarded than other geographic areas. Greater pessimism about the mentally retarded's being "self supporting" was expressed by the Southeastern and Southwestern states when compared to other geographic areas.

Miscellaneous Statements about the Mentally Retarded

When analyzed by the geographic variable, the extent of respondent agreement on the following statements differed significantly: A mentally retarded person living in the neighborhood would tend to lower property values (.05), Most parents of a mentally retarded child can have other normal children (.05), and I would not want my child to attend a school that also has classes for mentally retarded children (.05).

The South Atlantic, Southeastern, and Southwestern states had a higher ratio of respondents (compared to other areas) indicating that a retarded person's living in the neighborhood would tend to lower property values. Proportionately, the West-North Central states were at the other polarity.

Rating the Mentally Retarded on Ability to Perform Various Functions

The geographic variable affected the way respondents grouped the mentally retarded on the latter's ability to perform various functions. Answers differing significantly were evidenced in the proportion of the mentally retarded who could learn to read and write (.05), learn to add and subtract (.01), learn to use public transportation (.01), learn to do simple sewing (.01), learn to dance (.01), and learn to hold a regular job (.01). While responses varied by geographic area on all of the mentioned functions, in all cases the Southeastern states were clearly much more pessimistic about the ability of the mentally retarded than were other areas.

"Cures" for Mental Retardation

Answers to the question "Can mental retardation be cured?" were not affected by the geographic area of respondents.

Semantic Differential

Figure 1 presented total responses on word pairs in the semantic dif-

ferential. In virtually all cases, analysis indicated that each geographic area ranked the mentally retarded significantly lower (.01) than they ranked a normal person. The only exceptions were the New England states on dishonest-honest (.05); the Mountain states on cruel-kind (NS), dishonest-honest (NS), tense-relaxed (.05), unhappy-happy (.05), and immoral-moral (NS); and the Pacific states on immoral-moral (NS).

On the semantic differentials for both the "normal" and the "mentally retarded," there were no significant differences in answers indicating whether the respondents were thinking about a child or adult, a male or female.

Respondents' Acquaintance with a Mentally Retarded Person

When the geographic variable was applied to answers indicating whether or not the subjects felt that they knew a mentally retarded person, significant (.01) differences in answers were elicited. While all areas answered affirmatively, the New England states and Southwestern states were most positive while the South Atlantic, Middle Atlantic, and Southeastern states were least affirmative.

Variable: Religion

Sample Distribution

The sample distribution for the variable religion was: Protestant, 951; Roman Catholic, 365; Jewish, 45; Other, 28; None/Not Answered, 42.

Sources of Information about Mental Retardation

Answers indicating whether or not the respondents had read or heard about mental retardation in the past few months were not affected by the religion of the respondents. Answers identifying source of information about mental retardation disclosed no significance when analyzed by the same variable.

Incidence of Mental Retardation

No significant differences in respondents' estimates for the incidence of mental retardation were found when answers were analyzed by the religion variable.

Causes of Mental Retardation

Answers identifying causes of mental retardation differed significantly (.05) when analyzed by the religion of the respondents. Proportionately, Jewish respondents gave more responses and focused upon heredity and birth injuries as etiological factors.

Prevention of Mental Retardation

The religion variable was significant (.05) when applied to the query "Can mental retardation be prevented?" Proportionately more Jewish respondents answered affirmatively. There was no significance, however, when the same variable was applied to responses identifying means by which mental retardation could be prevented.

"Social Worth" of the Mentally Retarded

When analyzed by the religion of the respondents, answers to a series of statements grouping the mentally retarded on perceived social worth displayed significant differences on the proportion of mentally retarded persons who would make good employees (.05) and the proportion of the mentally retarded who would make good parents (.01). While all groups were well represented in the central ranking, Catholic and Jewish respondents were more liberal in the positive polarity than were Protestant respondents.

Participation in Various Roles

Significant differences in responses reflecting subjects' attitudes towards various roles for the mentally retarded were evidenced when this area was explored by the religion variable. Specific statements indicated whether the mentally retarded should go downtown alone (.05), get medical care at regular hospitals (.05), drink liquor (.01), marry (.01), and have a family (children) (.01). While all three religions answered in the same general positive or negative tenor, the Jewish respondents differed from Catholic and Protestant respondents in proportion to yes responses for all of the statements.

Identifying/Ranking Services for the Mentally Retarded

The religion of respondents was not a significant factor in indentifying/ranking the most important services for the mentally retarded.

Knowledge of Groups Working to Help the Mentally Retarded

Significance at the .01 level was evidenced when responses indicating whether subjects knew of groups working to help the mentally retarded were analyzed by the religion variable. Jewish respondents were more affirmative in this respect; however, no significance was evidenced in answers indicating whether the respondents had participated in a program or a drive to help the mentally retarded.

Grouping the Mentally Retarded

The religion of respondents significantly affected answers grouping the proportion of the mentally retarded who look differently (.01), should be in institutions (.01), should be cared for at home (.05), and can be self supporting (.05). On these items, Jewish respondents differed from Catholic and Protestant respondents. While all tendencies were toward central rankings, the Jewish respondents felt that fewer mentally retarded persons "looked differently" and that fewer "should be in institutions." Conversely, Jewish subjects were more positive that the retarded "should be cared for at home" and that the retarded also "can be self supporting."

Miscellaneous Statements about the Mentally Retarded

The extent of agreement upon the following statements about the mentally retarded differed significantly when analyzed by the religion of the respondents: The mentally retarded never know they differ from other people (.05), A mentally retarded adult living in the neighborhood would tend to lower property values (.05), and You can usually tell a retarded person by his looks/appearance (.01). While all the groups tended to disagree with these statements, the Jewish respondents disagreed to a greater extent than did the Catholic and Protestant subjects.

Rating the Mentally Retarded on Ability to Perform Various Functions

The religion variable elicited significantly different responses in grouping the proportion of the mentally retarded who could learn to drive a car (.05) and who could have a regular job (.01). The central ranks were well represented; however, Catholic and Jewish respondents were somewhat more liberal in grouping the positive polarities.

"Cures" for Mental Retardation

No significant differences in responses were evidenced when the question Can mental retardation be cured? was analyzed by the religion variable.

Semantic Differential

Figure 1 presented responses on word pairs in the semantic differential. In all cases, analysis indicated that each of the religions ranked the mentally retarded significantly lower (.01) than they ranked the normal person. For both the "mentally retarded" and "normal" semantic

differential, no significant differences were evidenced in statements indicating whether the respondents were thinking of a child or adult, a male or female.

Respondents' Acquaintance with a Mentally Retarded Person

The religion of respondents did not have a significant impact upon answers indicating whether or not the subjects felt that they knew a mentally retarded person.

• IV •

ANALYSIS OF SEMANTIC DIFFERENTIAL

General Analysis

Profiles graphically displaying respondents' rankings for both the mentally retarded and normal individuals on the semantic differential are presented for the total sample group (Figure 1, pp. 21). Interpretations are given with each of the independent variables indicating the statistical significance. (See index for appropriate pages)

Also included for the total sample and each of the variables are tabular data and interpretations indicating whether the respondent was thinking of a child or adult, a male or female, when answering the semantic differential. (See index for appropriate pages)

Factor Analysis

Tabular data relevant to factor analysis of the semantic differential are presented in Tables SD1, SD2, SD3, and SD4.

Varimax rotation disclosed loading on the three factors. Double loadings (mentally retarded and normal) occurred on factor one (which appears to represent "overt" characteristics) and on factor two (which appears to represent "covert" characteristics). A third factor (which appeared to be "evaluative-judgmental" in nature) loaded only for the normal.

TABLE SD-1
Correlational Matrix
Semantic Differential Polarities Within Normal Group

Column =	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Row 1	1.00															
Row 2	-.04	1.00														
Row 3	.49	-.02	1.00													
Row 4	-.02	.36	-.04	1.00												
Row 5	.32	.00	.44	-.05	1.00											
Row 6	-.09	.36	-.19	.37	-.20	1.00										
Row 7	.37	-.06	.44	-.07	.50	-.29	1.00									
Row 8	.39	-.02	.39	-.05	.41	-.30	.57	1.00								
Row 9	-.05	.31	-.16	.35	-.26	.64	-.26	-.29	1.00							
Row 10	.34	-.08	.40	-.06	.43	-.25	.60	.63	-.28	1.00						
Row 11	-.11	.35	-.12	.38	-.19	.56	-.26	-.25	.58	-.26	1.00					
Row 12	.32	.03	.34	.01	.33	-.21	.40	.48	-.14	.46	-.14	1.00				
Row 13	.33	.08	.30	.04	.28	-.04	.29	.33	-.01	.32	-.06	.35	1.00			
Row 14	-.12	.35	-.16	.36	-.23	.56	-.27	-.29	.60	-.35	.61	-.21	-.09	1.00		
Row 15	.40	-.03	.43	-.04	.38	-.27	.51	.62	-.18	.57	-.25	.58	.41	-.28	1.00	
Row 16	-.03	.34	-.14	.34	-.23	.52	-.24	-.30	.56	-.28	.53	-.17	-.02	.60	-.25	1.00

TABLE SD-2
Correlational Matrix
Semantic Differential Polarities Within Retarded Group

Row	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Row 1	1.00															
Row 2	.10	1.00														
Row 3	.44	.05	1.00													
Row 4	.04	.35	.00	1.00												
Row 5	.31	.05	.39	.03	1.00											
Row 6	.20	.37	.12	.23	.03	1.00										
Row 7	.28	-.05	.34	-.02	.42	-.06	1.00									
Row 8	.19	.06	.23	.10	.38	-.15	.45	1.00								
Row 9	.10	.41	.01	.27	-.07	.52	-.12	-.16	1.00							
Row 10	.19	-.05	.24	.05	.41	-.12	.48	.50	-.14	1.00						
Row 11	.02	.39	-.03	.49	.01	.31	-.11	.05	.38	-.09	1.00					
Row 12	.18	.12	.30	.05	.26	.01	.15	.21	.02	.22	.05	1.00				
Row 13	.25	.24	.22	.01	.29	.25	.25	.16	.25	.19	.08	.14	1.00			
Row 14	.05	.40	.03	.36	.00	.40	-.10	-.05	.44	-.22	.49	.04	.18	1.00		
Row 15	.23	.09	.34	.09	.30	-.01	.25	.28	-.06	.28	.05	.47	.17	.03	1.00	
Row 16	.11	.33	.05	.27	.01	.44	.00	-.11	.44	-.09	.30	.08	.26	.41	-.02	1.00

TABLE SD-3
Correlational Matrix
Semantic Differential Polarities Between Normal and Retarded Groups

		(Normal)																	
Column =		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Row 1	(Mentally Retarded)	.01	.14	.04	.14	.01	.16	.02	.03	.14	.05	.17	.05	.11	.15	.04	.12		
Row 2		.04	.27	.07	.20	.06	.19	.01	.04	.18	.00	.22	.06	.04	.19	.02	.21		
Row 3		.02	.16	.02	.11	.02	.15	.06	.09	.13	.09	.15	.09	.13	.14	.09	.13		
Row 4		.11	.05	.13	.08	.21	.00	.16	.14	-.01	.16	.05	.10	.09	.01	.08	.01		
Row 5		.06	.13	.11	.18	.12	.08	.11	.12	.09	.15	.10	.10	.17	.11	.12	.08		
Row 6		.01	.23	-.02	.16	-.01	.23	-.02	-.01	.23	-.03	.28	.05	.03	.26	-.03	.21		
Row 7		.14	.11	.10	.15	.11	.08	.18	.19	.05	.18	.06	.19	.18	.04	.18	.08		
Row 8		.16	.03	.18	.06	.16	-.01	.26	.25	-.05	.31	.01	.22	.20	-.04	.24	-.01		
Row 9		.08	.21	.03	.11	.02	.21	-.03	-.03	.24	-.08	.22	.03	.07	.27	.00	.29		
Row 10		.23	.06	.21	.14	.17	.03	.22	.27	.01	.30	.01	.22	.22	.06	.25	-.02		
Row 11		.04	.12	.08	.09	.13	.05	.10	.05	.06	.05	.15	.04	.05	.12	.03	.10		
Row 12		-.01	.17	.02	.12	-.02	.16	-.02	.02	.14	.02	.18	.03	.08	.19	-.01	.13		
Row 13		.05	.19	.03	.19	.01	.18	-.02	.02	.17	.02	.23	.12	.03	.21	.03	.25		
Row 14		.01	.16	.03	.16	.03	.20	.01	-.01	.16	.01	.22	.00	.04	.23	-.03	.18		
Row 15		.02	.18	.04	.12	.04	.07	.05	.10	.05	.10	.10	.11	.11	.07	.11	.03		
Row 16		.06	.19	-.01	.25	-.03	.22	-.05	.00	.24	-.03	.24	.07	.09	.26	-.03	.30		

(Mentally Retarded)

TABLE SD-4
Varimax Rotation

	Factor 1 (Normal)	Factor 1' (Retarded)	Factor 2 (Normal)	Factor 2' (Retarded)	Factor 3 (Normal)
1. Strong — Weak	-.59	.45	.03	-.11	.35
2. Ugly — Beautiful	-.02	.07	.45	-.57*	.26
3. Healthy — Sick	-.61*	.55*	-.07	-.04	.38
4. Inferior — Superior	-.02	.07	.48	-.56*	.27
5. Sane — Insane	-.55*	.61*	-.20	.01	.36
6. Cruel — Kind	.20	-.03	.71*	-.57*	.55*
7. Useful — Useless	-.67*	.56*	-.23	.17	.52*
8. Honest — Dishonest	-.71*	.56*	-.23	.08	.57*
9. Dangerous — Safe	.15	-.14	.76*	-.61*	.60*
10. Clean — Dirty	.18	.55*	-.26	.20	.56*
11. Ignorant — Educated	-.68*	.00	.68*	-.65*	.54*
12. Relaxed — Tense	-.62*	.47	-.08	-.08	.40
13. Aggressive — Passive	-.50*	.32	.06	-.24	.27
14. Untidy — Neat	.23	-.05	.72*	-.66*	.60*
15. Happy — Unhappy	-.74*	.56*	-.15	-.06	.58*
16. Immoral — Moral	.16	-.04	.70*	-.52*	.53*

References

- Andrews, F.E. *Attitudes toward giving*. New York: Harper, 1948.
- Badt, M. Attitudes of university students toward exceptional children. *Exceptional Children*, 1957, 23, 286-295.
- Barber, B. A study of the attitudes of mothers of mentally retarded children as influenced by socioeconomic status. *Dissertation Abstracts*, 1963, 24, 415.
- Belinkoff, C. Community attitudes toward mentally retarded. *American Journal of Mental Deficiency*, 1960, 65, 221-226.
- Berreman, J.V. Some implications of research in the social psychology of physical disability. *Exceptional Children*, 1954, 20, 347-357.
- Bitter, J.A. Attitude change by parents of trainable mentally retarded children as a result of group discussion. *Exceptional Children*, 1963, 30, 173-179.
- Blatt, B. Some persistently recurring assumptions concerning the mentally subnormal. *The Training School Bulletin*, 1960, 57, 48-59.
- Brown, C., & Chisseli, E. *Scientific method in psychology*. New York: McGraw-Hill, 1965.
- Cleland, C., & Cochran, I. The effects of institutional tours in attitudes of high school seniors. *American Journal of Mental Deficiency*, 1961, 65, 473-481.
- Cohen, J.S. An analysis of vocational failures on mental retardates placed in the community after a period of institutionalization. *American Journal of Mental Deficiency*, 1960, 65, 371-375.
- Cohen, J. Employer attitudes toward hiring mentally retarded individuals. *American Journal of Mental Deficiency*, 1963, 67, 705-712.
- Dingman, H.F., Eyman, R.K., & Windle, C.D. An investigation of some child-rearing attitudes of mothers with retarded children. *American Journal of Mental Deficiency*, 1963, 67, 899-908.
- English, M.S., & English, A.C. *A comprehensive dictionary of psychological and psychoanalytic terms*. New York: Longmans, 1958.
- Gardner, W.I., & Nisonger, H.W. *A manual on program development in mental retardation*. Willimantic, Connecticut: American Association on Mental Deficiency, 1962.
- Graliker, B., et al. Teen-age reaction to a mentally retarded sibling. *American Journal of Mental Deficiency*, 1962, 66, 838-843.
- Guskin, S. The influence of labeling upon the perception of subnormality in mentally defective children. *American Journal of Mental Deficiency*, 1962, 67, 402-406.
- Jaffe, J. Attitudes of adolescents toward the mentally retarded. *American Journal of Mental Deficiency*, 1966, 70, 907-912.
- Jones, R., & Gottfried, N. Preferences and configurations of interests in special class teaching. *Exceptional Children*, 1962, 28, 371-377.

- Kidd, J.W. Some unwarranted assumptions in the education and habilitation of handicapped children. *Education and Training the Mentally Retarded*, 1966, 1, 54-58.
- Kingsley, H., & Carry, R. *The nature and conditions of learning*. Englewood Cliffs, N.J.: Prentice-Hall, 1957.
- Kvaraceus, W.C. Acceptance-rejection and exceptionality. *Exceptional Children*, 1956, 22, 328-331.
- Mental Retardation in Minnesota*. A survey of public information and attitudes. The Minnesota Association for Retarded Children, by the Minnesota Department of Public Welfare, 1962.
- Meyers, C.E., Sitkee, E.G., & Watts, C.A. Attitudes toward special education and the handicapped in two community groups. *American Journal of Mental Deficiency*, 1966, 71, 78-84.
- Michal-Smith, H. *The mentally retarded patient*. Philadelphia: J.B. Lippincott, 1956.
- Mohoney, S., & Pangrac, I. Misconceptions of college students about mental deficiency. *American Journal of Mental Deficiency*, 1960, 64, 671-678.
- Myerson, L. Somatopsychology of physical disability. Chapter I in *Psychology of Exceptional Children and Youth*. Englewood Cliffs, N.J.: Prentice-Hall, 1955.
- National study of attitudes toward mental retardation*. The President's Committee on Mental Retardation, by Research Department, Young & Rubicam, Inc. February, 1966.
- Peckham, R.A. Problems in job adjustment. *American Journal of Mental Deficiency*, 1951, 56, 448-453.
- Phelps, W.R. Attitudes related to the employment of mentally retarded. *American Journal of Mental Deficiency*, 1965, 69, 575-585.
- Polonsky, A. Beliefs and opinions concerning mental deficiency. *American Journal of Mental Deficiency*, 1961, 66, 12-17.
- Sarason, S.B. *Psychological problems in mental deficiency*. New York: Harper, 1959.
- Sellin, D., & Mulchohay, R. The relationship of an institutional tour upon opinions about mental retardation. *American Journal of Mental Deficiency*, 1965, 70, 403-412.
- Semmel, M.L. Teacher attitudes, and information pertaining to mental deficiency. *American Journal of Mental Deficiency*, 1959, 63, 566-567.
- Tenny, J.W. The minority status of the handicapped. *Exceptional Children*, 1953, 19, 260-264.
- Winthrop, H., & Taylor, H. An inquiry concerning the prevalence of popular misconceptions relating to mental deficiency. *American Journal of Mental Deficiency*, 1957, 62, 344-348.
- Warren, S., & Turner, D.R. Attitudes of professionals and students toward exceptional children. *Training School Bulletin*, 1966, 62, 136-144.

APPENDIXES

- A. Instrumentation for Study
 - 1. Questionnaire
 - 2. Keys for Coding:
 - Mentally Retarded
 - Supplemental Phrases
 - Prevention of Mental Retardation
 - Negative Responses (question 7)
 - Cures for Mental Retardation
 - Occupation
 - Demographic Area
 - Geographic Area
- B. Exhibits
 - 1. Estimated Prevalence/Incidence for Various Disability Areas (A)
 - 2. Advertisements Relevant to Prevalence/Incidence of Mental Retardation (B)
- C. Sample Design

Questionnaire for:

"Public Awareness About Mental Retardation: A Survey and Analysis"

Part I

Introduction at Dwelling Unit: Hello, I'm (*your name*) from the National Opinion Research Center. We are conducting a national survey, and I'm here to interview (*Insert quota qualification*). Is there someone here who fits that description?

If yes, proceed with interview.

If no, record call on Surs and go on to next Du.

1. In your own words, what does the phrase "mentally retarded" mean to you?

9/10

2. In the last several months have you heard or read anything about mental retardation?

Yes (ask A) 1 11/0
 No (ask B) 2

- A. If yes: Did you read or hear about it from any of the sources listed on this card? Hand respondent card A. Which one (s)? Anywhere else?

Newspaper (s) 1
 Magazine (s) 2
 Books 3
 Radio 4
 Television 5
 Movies 6
 Lectures or talks 7
 Family or friends 8
 Conversation with friends, neighbors, colleagues or others 9
 Other (Specify) X

- B. If no: Have you ever heard or read anything about mental retardation?

Yes (go to Q. 3) 1 13/0
 No (skip to Q. 18) 2

3. Of every thousand people in the United States, how many would you guess are mentally retarded—Would you say one in a thousand, five in a thousand, ten in a thousand, or what? Record in A; Then ask B-E and record response.

A. are mentally retarded? in 1,000 14-16/yy
 B. are blind? in 1,000 17-19/yy
 C. have cerebral palsy? in 1,000 20-22/yy
 D. have paralytic polio? in 1,000 23-25/yy
 E. have rheumatic heart disease? in 1,000 26-28/yy

4. What do you think are the most common causes of mental retardation? Do not read categories. Record verbatim and circle appropriate codes.

Heredity 1 29/0
 Birth injury 2
 Disease/illness 3
 Accident/trauma 4
 Pre-natal illness 5
 Other (specify) 6
 Don't know 7

5. As far as you know, can anything be done at this time to prevent mental retardation?

Yes (ask A) 8 30/0
 No (go to Q. 6) 9

- A. If yes: What can be done to prevent it?

31/0

6. As far as you know, what proportion of the mentally retarded people would make good. . . . (ask A-F)
 Hand respondent card B.

Public Awareness About Mental Retardation

- | | Almost
all | Most | Some | Only
few | None | Don't
know | |
|-----------------------|---------------|------|------|-------------|------|---------------|------|
| A. Employees? | 1 | 2 | 3 | 4 | 5 | 6 | 32/0 |
| B. Neighbors? | 1 | 2 | 3 | 4 | 5 | 6 | 33/0 |
| C. Friends? | 1 | 2 | 3 | 4 | 5 | 6 | 34/0 |
| D. Citizens? | 1 | 2 | 3 | 4 | 5 | 6 | 35/0 |
| E. Parents? | 1 | 2 | 3 | 4 | 5 | 6 | 36/0 |
| F. Husbands or wives? | 1 | 2 | 3 | 4 | 5 | 6 | 37/0 |
7. In your opinion, should most retarded people. . . .
- | | Yes | No | Don't
know | |
|---|-----|----|---------------|------|
| A. Go downtown alone? | 1 | 2 | 3 | 38/0 |
| B. Get general medical care at regular hospitals? | 4 | 5 | 6 | 39/0 |
| C. Use public playgrounds or beaches? | 1 | 2 | 3 | 40/0 |
| D. Drink liquor? | 4 | 5 | 6 | 41/0 |
| E. Drive a car? | 1 | 2 | 3 | 42/0 |
| F. Vote? | 4 | 5 | 6 | 43/0 |
| G. Marry? | 1 | 2 | 3 | 44/0 |
- A. If no to any: Why do you think mentally retarded people should not do (that/these) thing(s)?
8. As far as you know, what kind of services are available around here and in the state to help mentally retarded people? Do not read categories. Record verbatim; Then circle appropriate codes.
- | | | |
|---|---|------|
| School (education) | 1 | 47/0 |
| Institution | 2 | |
| Hospitals and clinics | 3 | |
| Association for retarded children | 4 | |
| Social agency | 5 | |
| Church | 6 | |
| Other | 7 | |
9. Here is a list of services for the retarded. Hand respondent card C.
- | | A.
Which would you
say is the
most important
service needed
for the retarded? | B.
Which is the
second most
important? | C.
Which is
third? |
|--|--|---|--------------------------|
| Special classes to educate or train | 1 48/0 | 1 49/0 | 1 50/0 |
| Research to learn about causes | 2 | 2 | 2 |
| Foster homes for children of the mentally retarded | 3 | 3 | 3 |
| Counseling parents of the mentally retarded | 4 | 4 | 4 |
| Institutions | 5 | 5 | 5 |
| Centers where retarded can learn jobs | 6 | 6 | 6 |
| Day care centers | 7 | 7 | 7 |
10. Have you heard of any groups or associations that are working to help the mentally retarded?
- | | | |
|--------------------------------------|---|------|
| Yes (ask A&B) | 1 | 51/0 |
| No (go to Q. 11) | 2 | |

If yes:

- A. What is the name of the group? Do not read categories.
Record verbatim; Then circle appropriate codes.

Association for Retarded Children	....	3	52/0
Kennedy Foundation	.....	4	
Council for Exceptional Children	.....	5	
Church	.....	6	
Service organization	.....	7	
Other (Specify)	.....	8	
Don't know	.....	9	

- B. Have you, or any member of your family, ever helped out or taken part in a program or drive for the mentally retarded?

Yes	..... (ask C)	1	53/0
No	..... (go to Q. 11)	2	

10. C. If yes to B: What did you do? Do not read categories.

Give money	.....	3	54/0
Give time	.....	4	
Direct service	.....	5	
Other (Specify)	.....	6	

11. Hand respondent card B again. What proportion of mentally retarded people

	Almost					Don't	
	all	Most	Some	Few	None	know	

A. Look different from other people?	1	2	3	4	5	6	55/0
B. Are mentally ill or insane?	1	2	3	4	5	6	56/0
C. Can learn to live normal lives?	1	2	3	4	5	6	57/0
D. Should be placed in institutions?	1	2	3	4	5	6	58/0
E. Had mentally retarded parents?	1	2	3	4	5	6	59/0
F. Can have normal children?	1	2	3	4	5	6	60/0
G. Should be cared for at home?	1	2	3	4	5	6	61/0
H. Can be self-supporting?	1	2	3	4	5	6	62/0
I. Cannot ever learn to do anything for themselves?	1	2	3	4	5	6	63/0

12. Next I'm going to read you a few statements. Please tell me whether you agree strongly, agree, disagree, or disagree strongly with each statement.

Agree				Strongly	Don't
strongly	Agree	Disagree	disagree	know	

A. Mentally retarded people never know they're different from other people.	1	2	3	4	5	64/0
B. Mentally retarded children have a right to public education.	1	2	3	4	5	65/0

Public Awareness About Mental Retardation

C. A mentally retarded adult living in my neighborhood would tend to lower the value of my property.	1	2	3	4	5	66/0
D. Programs for retarded individuals are too expensive in relation to what the retarded person gains from them.	1	2	3	4	5	67/0
E. A retarded youth should not expect to participate in teenage activities available in the community.	1	2	3	4	5	68/0
F. You can usually tell a mentally retarded person (by his appearance/ by how he looks.)	1	2	3	4	5	69/0
G. Most parents of a retarded child can have other, normal children.	1	2	3	4	5	70/0
H. A parent should allow his normal child to play with a retarded child.	1	2	3	4	5	71/0
I. I would not want my child to attend a school that also has a class for retarded children.	1	2	3	4	5	72/0
J. Most people feel uncomfortable in the presence of a mentally retarded person.	1	2	3	4	5	73/0
13. Hand respondent card B again. What proportion of mentally retarded people can. . .						

	Agree strongly	Agree	Dis- agree	Strongly dis- agree	Don't know		
A. Learn to read and write?	1	2	3	4	5	6	10/0
B. Learn to add and subtract?	1	2	3	4	5	6	11/0
C. Learn to feed themselves?	1	2	3	4	5	6	12/0
D. Learn to dress themselves?	1	2	3	4	5	6	13/0
E. Learn to use public transportation?	1	2	3	4	5	6	14/0
F. Learn to do simple sewing?	1	2	3	4	5	6	15/0
G. Learn to drive a car?	1	2	3	4	5	6	16/0
H. Learn to dance?	1	2	3	4	5	6	17/0
I. Hold a regular job?	1	2	3	4	5	6	18/0
J. Unless "none" to I: What kinds of jobs can they do?							

14. We've been talking about ways the mentally retarded might be helped. As far as you know, can anything be done at this time to cure retardation?

Yes (ask A) 1 21/0
No (go to Q. 15) 2

A. If yes: How can retardation be cured?

15. Up till now we've been talking about mentally retarded people. Let's talk for a minute about normal people. Here is a short questionnaire for you to fill out describing how you would think of a normal person. Hand respondent white word pair sheet. This is a series of word pairs; the first is strong-weak. If you think of a normal person as being very very strong you would make a check in the box nearest "strong." If you consider a normal person to be very very weak, you make a check in the box nearest "weak." And if you consider a normal person somewhere in between you would make a check in one of the other boxes depending on how weak or strong you think a normal person is. Please check one box for each pair of words.

When respondent finishes, take back sheet and ask. . . .

- A. When you filled this out, were you thinking of a child or adult?

Child 1 55/0
Adult 2
Both 3
No one in particular 4
Don't know 5

- B. Were you thinking of a male or a female?

Male 1 56/0
Female 2
Both 3
No one in particular 4
Don't know 5

16. Here is another sheet of word pairs, only this time I would like you to make checks in boxes to describe a mentally retarded person. Hand respondent pink word pair sheet.

When respondent finishes, take back word sheet and ask. . . .

- A. When you filled this out were you thinking of a child or an adult?

Child 1 57/0
Adult 2
Both 3
No one in particular 4
Don't know 5

- B. Were you thinking of a male or a female?

Male 1 58/0
Female 2
Both 3
No one in particular 4
Don't know 5

17. Have you ever known a person who you thought was mentally retarded?

Yes (ask A-E) 1 59/0
No (skip to Q. 18) 2

If yes:

- A. Is (he/she/the one you know best) a neighbor around here, a friend of the

Public Awareness About Mental Retardation

family, related to you, or what? Record verbatim; then circle appropriate codes.

- Member of respondent's immediate family 1 60/0
 Other relative of respondent 2
 Someone in neighborhood 3
 Friend of family 4
 Person at work or related to person at work 5
 Casual acquaintance 6
 Other (specify) 7
- B. Is that a boy or a girl (man/woman)?
 Male 8
 Female 9
- C. How old is (he/she) now? 62-63/yy
- D. (Did/Does) (he/she) live at home or in an institution?
 Home 1 64/0
 Institution 2
 Don't know 3
- E. (Did/Does) (he/she) attend special classes?
 Yes (ask F) 4 65/0
 No 5
 Don't know 6
- F. If yes to E: Did the classes help (him/her)?
 Yes (ask G) 7 66/0
 No 8
 Don't know 9
- G. If yes to F: How did they help? 67/0

Normal Person
 Semantic Differential

Here is a short questionnaire for you to fill out describing how you would think of a normal person.

This is a series of word pairs; the first is strong-weak. If you think of a normal person as being very-very strong, you would make a check in the box nearest "strong." If you consider a normal person to be very, very weak, you would make a check in the box nearest "weak." And if you consider a normal person somewhere in between, you would make a check in one of the other boxes depending on how weak or strong you think a normal person is. Please check one box for each pair of words.

A normal person is

strong	_____	_____	_____	_____	_____	weak	23/0
ugly	_____	_____	_____	_____	_____	beautiful	24/0

Appendix A

71

healthy	_____	_____	_____	_____	sick	25/0
inferior	_____	_____	_____	_____	superior	26/0
sane	_____	_____	_____	_____	insane	27/0
cruel	_____	_____	_____	_____	kind	28/0
useful	_____	_____	_____	_____	useless	29/0
honest	_____	_____	_____	_____	dishonest	30/0
dangerous	_____	_____	_____	_____	safe	31/0
clean	_____	_____	_____	_____	dirty	32/0
ignorant	_____	_____	_____	_____	educated	33/0
relaxed	_____	_____	_____	_____	tense	34/0
aggressive	_____	_____	_____	_____	passive	35/0
untidy	_____	_____	_____	_____	neat	36/0
happy	_____	_____	_____	_____	unhappy	37/0
immoral	_____	_____	_____	_____	moral	38/0

Retarded Person Semantic Differential

Here is another sheet of word pairs, only this time I would like you to make checks in boxes to describe a *mentally retarded person*.

A mentally retarded person is

strong	_____	_____	_____	_____	weak	39/0
ugly	_____	_____	_____	_____	beautiful	40/0
healthy	_____	_____	_____	_____	sick	41/0
inferior	_____	_____	_____	_____	superior	42/0
sane	_____	_____	_____	_____	insane	43/0
cruel	_____	_____	_____	_____	kind	44/0
useful	_____	_____	_____	_____	useless	45/0
honest	_____	_____	_____	_____	dishonest	46/0
dangerous	_____	_____	_____	_____	safe	47/0

clean	_____	_____	_____	_____	dirty	48/0
ignorant	_____	_____	_____	_____	educated	49/0
relaxed	_____	_____	_____	_____	tense	50/0
aggressive	_____	_____	_____	_____	passive	51/0
untidy	_____	_____	_____	_____	neat	52/0
happy	_____	_____	_____	_____	unhappy	53/0
immoral	_____	_____	_____	_____	moral	54/0

Format for Part II

Now I have a few background questions.

1. Are you currently married, widowed, divorced, separated, or single?

Current married	....	(ask A)	..... 1	10/0
Widowed	.....	(ask A)	..... 2	
Divorced or separated		(ask A)	..... 3	
Single, never married		(go to Q. 30)	.. 4	

If ever married: A. How many children do you have?

_____	No. of children	11-12/yy
-------	-----------------	----------

2. A. What kind of work (do/did) you normally do?

Occupation: _____	15-17/yyy
-------------------	-----------

(Probe, if vague: What did you actually do in that job?)

Industry: _____	18-20/yyy
-----------------	-----------

(Probe, if vague: What does that firm/organization/agency make or do?)

B. Are/Were you self-employed?

Yes	..... 1	21/0
No	..... 2	

3. A. What was the name of the last school you attended?

B. And what was the highest grade or year you completed in that school? (Code below)

No formal schooling	..... 1	32/0
1-4 years	..... 2	
5-7 years	..... 3	
8 years	..... 4	
Some high school (1-3 years)	..... 5	
Completed high school	..... 6	
Some college (1-3 years)	..... 7	
Completed college	..... 8	
Graduate or professional school	..... 9	

4. What is your religious preference?

Protestant (ask A)	1	33/0
Roman Catholic	2	
Jewish	3	
Other	4	
None	5	

4. A. If Protestant: What denomination?

Baptist	1	34/0
Methodist	2	
Episcopalian	3	
Presbyterian	4	
Lutheran	5	
Congregational (United Church of Christ)	6	
Disciples of Christ	7	
Other (Specify)	8	
No denomination	9	

5. (Hand respondent card D) And, into which of the groups on this card did the total income for your family fall last year (before taxes)?

A. Under \$3,000	1	47/y
B. \$3,000 to \$3,999	2	
C. \$4,000 to \$4,999	3	
D. \$5,000 to \$5,999	4	
E. \$6,000 to \$6,999	5	
F. \$7,000 to \$7,999	6	
G. \$8,000 to \$9,999	7	
H. \$10,000 to \$14,999	8	
I. \$15,000 or over	9	
Don't know, refused	0	
(Estimate:)		

6. Finally, may I have your name and telephone number in case my office wants to verify this interview?

Name: _____

Telephone number: _____

Area Code: _____

Thank you very much for your time and cooperation. (You have been very helpful.)

Fill in the items below immediately after leaving respondent.

Time inter-	AM	Total length of interview	
view ended:	PM	minutes	49-51/yyy

A. Respondent's Sex:

Male	1	59/0	PSU	52-54/
Female	2		SU	55-58/

B. Respondent's Race:

White 1 60/0
 Negro 2
 Oriental 3
 Other (Specify) 4

Date of interview: _____

Interviewer's Signature _____

Key for Coding Meaning of "Mentally Retarded"

Q. 1. What does the phrase "mentally retarded" mean to you?

1. Mentally deficient. Below average intelligence (no reason given). Do not double-code with 2 or 3.
 low IQ, lack intelligence, lack full mental capabilities, subnormal ability to think, mind or brain not developed, mind not up to par, mentally slow for age, not all there mentally
2. Mentally deficient because of birth injury, defects, brain damage. Do not double-code with 1 or 3.
 not developed mentally because of an injury, born with some sort of brain damage
3. Mentally deficient for other reasons. Do not double-code with 1 or 2.
 feeble-minded parents, sickness
4. Slow learner or incapable of learning
 slow thinking, backward, unable to comprehend, lack ability to grasp, stupid
5. Lack judgement, maturity, sense of responsibility
6. Mentally ill
 unbalanced, crazy, deranged, mental disease, sickness
7. Not normal, not right, sick—not otherwise specified. Do not double-code with 1-6.
8. Miscellaneous
9. Don't know or irrelevant answer

Key for Coding Supplemental Phrases on Meaning of "Mentally Retarded"

1. Unable to support or care for selves
 leaves them helpless, can't operate in society, can't do for selves, can't cope with situations, can't function normally
2. Need help, care, treatment, supervision
 need special training, need supervision, need medical attention, need special schools
3. Physical appearance, handicaps
 odd appearance, faulty speech, jerky movements
4. They are educable, can be trained for some jobs
 can work with their hands
5. Distinguishes among the retarded, they are not all alike
 some are better off than others, some can be trained, sometimes can be helped
6. Expressions of sympathy
 I feel sorry for them, I hate to see them that way, makes me sad

Key for Coding "Prevention of Mental Retardation"

Q. 5-A. What can be done to prevent mental retardation?

1. Better prenatal care of mother (except specific reference to diet)

proper health care of expectant mother, keep mother healthy when pregnant, as soon as you become pregnant go to a good doctor, avoid prescribing certain drugs to expectant mothers

2. Better obstetrics, prevent birth damage, defects
if could cut down on birth defects, perhaps inducing labor before brain damage, better care in the hospital to the baby at birth when it is being delivered, not give excess oxygen at birth, improved methods of birth delivery
3. Sterilization of unfit parents
sterilize mentally retarded so as not to produce more, two retarded people want to marry, steps should be taken so they do not reproduce
4. Better diets for expectant mothers—or for children
they could correct their diets, improve diets both in children and expectant mothers
5. More research
get more scientists working on it, further study and research
6. Miscellaneous or vague references to parents' actions, habits
parents can prevent it in their actions, more care of parents' habits that they are not too closely related
7. Religion, prayer, the Bible
good old fashion bible regeneration, prayer and faith
8. PKU test
9. Other means of prevention
more publicity about it

Key for Negative Responses (Question 7)

Q. 7-A. Why do you think mentally retarded people should not do these things?

Read answer(s) carefully and assign one of the following codes:

1. Respondent seems mainly concerned about the safety or health of the retarded person.
2. Respondent's concern is mainly about the safety of other people (who might be harmed by the retarded person).
3. Respondent is concerned equally about the retarded person and other people.
4. Answers cannot be evaluated in these terms.

Key for Coding "Cure for Mental Retardation"

Q. 14-A. How can retardation be cured?

1. PKU test, any mention of early diagnosis, early treatment
2. Teaching, training, guidance, work with them to overcome handicap
3. Kindness, understanding, sympathetic helpful environment
4. Medical care or treatment, therapy unspecified hospitals, surgery, medication, doctors, etc.
5. Psychiatric care, mental institution, shock therapy
6. Research, further study
7. Patterning—creating new patterns of nerves to circumvent those damaged by brain injury. (If you have an answer that you suspect refers to patterning but are not sure that it does, check with supervisor.)
8. Miscellaneous
9. Don't know how, vague uncodable answers

Key for Occupational Coding

1. Professional, Semiprofessional

Definition: Persons performing advisory, administrative, or research work requiring professional, scientific, or technical training at college level or its equivalent; or performing work in a restricted field of science or art which requires academic study or extensive practical experience.

Examples:

Professional: Actors, artists, clergymen, technical engineers, lawyers, pharmacists, teachers, trained and student nurses.

Semiprofessional: Dancers, draftsmen, surveyors.

2. Farmers, Farm Managers

Definition: Farmers are persons who, as owners or tenants, operate a farm for the production of crops or animals. (Excluding forestry) Farm managers are persons who, as paid employees, operate a farm for the production of crops or animals.

3. Proprietors, Managers, and Officials (except farm) and excluding selfemployed craftsmen)

Definition: Proprietors are persons who own, and, alone or with assistants, operate their own business and are responsible for making and carrying out its policies.

Managers are persons who, as paid employees, carry out such activities.

Officials are persons who have defined executive and administrative responsibilities.

Examples: Railroad conductors, postmasters, miscellaneous government officials.

4. Clerical, Sales, and Kindred Workers

Definition: Clerical or kindred workers are persons who, under supervision, perform one or more office activities which are generally of a routine nature.

Examples:

Clerical: Railway mail clerks, bookkeepers, cashiers, mail carriers, messengers, office machine operators, typists, telegraph operators, telephone operators.

Sales: Canvassers and solicitors, hucksters and peddlers, newsboys, insurance agents and brokers, salesmen.

5. Craftsmen, Foremen, and Kindred Workers

Definition: Craftsmen are persons engaged in a manual pursuit, usually not routine, which usually requires a long period of training or apprenticeship, and which calls for a high degree of judgment, manual dexterity, and ability to work with a minimum of supervision.

Foremen are persons who direct other workers under the supervision of a proprietor or manager.

Examples: Bakers, blacksmiths, carpenters, compositors and typesetters, electricians, inspectors, locomotive engineers and firemen, machinists, painters (constr.), plasterers, plumbers, roofers, shoemakers and repairers (not in factory), stationary engineers, tailors, furriers.

6. Operatives and Kindred Workers

Definition: Persons engaged in a manual pursuit, usually routine, for which little preliminary training, a moderate degree of judgment or manual dexterity, and a moderate degree of muscular force is required.

Examples: Apprentices, filling station and parking lot attendants, railroad

switchmen and brakemen, chauffeurs, truck drivers, deliverymen, bus and street-car conductors, merchant marine sailors, welders.

7. Service Workers

Definition: (a) Persons engaged in personal service in a private home
(b) Persons engaged in the protection of life and property
(c) Persons who perform cleaning and janitorial services in buildings other than private homes

Examples: (a) Housekeepers, laundresses, and servants
(b) City firemen, guards and watchmen, policemen, enlisted men in the armed forces
(c) Charwomen, janitors, porters
(d) Barbers, boarding and lodging house keepers, cooks (except private homes), elevator operators, practical nurses, waiters, bartenders

8. Farm Laborers and Foremen

Definition: Farm laborers are persons who work under direction on a farm excluding persons engaged in forestry occupations and laborers at cotton gins, packing houses, farms (Includes unpaid family workers)

9. Laborers (Except farm and mine)

Definition: Persons engaged in a manual pursuit, usually routine, which usually requires no special training, judgment, or manual dexterity, and in which the laborer usually supplies mainly muscular strength for the performance of coarse, heavy work

Examples: Fishermen, longshoremen, stevedores

Note:

Categories 8 and 9 are combined in the study.

Code for Demographic Areas

1. Ten largest metropolitan areas

1. New York
2. Chicago
3. Los Angeles
4. Philadelphia
5. Detroit
6. Baltimore
7. Houston
8. Cleveland
9. Washington, D.C.
10. St. Louis

2. Other metropolitan areas

3. Counties with town of 10,000 or over
4. Counties with no town as large as 10,000

Code for Geographic Areas

1. New England

Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut

2. Middle Atlantic

New York, New Jersey, Pennsylvania

3. East North Central
Ohio, Indiana, Illinois, Michigan, Wisconsin
4. West North Central
Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas
5. South Atlantic
Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida
6. East South Central
Kentucky, Tennessee, Alabama, Mississippi
7. West South Central
Arkansas, Louisiana, Oklahoma, Texas
8. Mountain
Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
9. Pacific
Washington, Oregon, California, Alaska, Hawaii

Exhibit A
Estimated Prevalence/Incidence
for
Various Disability Areas

	<i>Estimated Prevalence</i>	<i>Estimated Incidence per Thousand</i>
Mental Retardation	6,000,000	30
Blindness	400,000	2
Cerebral Palsy	685,000 - 800,000	4
Paralytic Polio	120,000	.6
Rheumatic Heart Disease	2,200,000	11

Exhibit B
Advertisements Relevant to
Prevalence/Incidence
of
Mental Retardation

Add up all the victims of blindness, paralytic polio, cerebral palsy, rheumatic heart disease.

Twice that total are mentally retarded.

What are you going to do about it?

6 million mentally retarded have enough problems without you adding to them.

Now, you're probably saying to yourself, "Why blame me? I didn't do anything."

That's the problem.

Do something.

1. Encourage your schools to have special teachers and special classes to identify and help mentally retarded children early in their lives.

2. Urge your community to set up workshops to train retardates who are capable of employment.

3. Persuade employers to hire the mentally retarded and help those who cannot find work by themselves.

4. Accept the mentally retarded as fellow human beings who can become assets to their families and communities, rather than burdens on society.

5. Write for the free booklet from the President's Committee on Mental Retardation, Washington, D. C.

Write for the free booklet from the President's Committee on Mental Retardation, Washington, D. C.

Name _____

Address _____

City _____

State _____ Zip Code _____

Sample Design

The universe sampled in these studies is the total non-institutional population of the United States, 21 years of age or older. For some purposes, changes in the universe, such as the establishment of an upper age limit or the inclusion of teen-agers, are made at the request of the project directors.

The sample is a standard multi-stage area probability sample to the block or segment level. At the block level, however, quota sampling is used with quotas based on sex, age, race, and employment status. The cost of the quota samples is substantially less than the cost of a full probability sample of the same size, but there is, of course, the chance of sample biases mainly due to not-at-homes which are not controlled by the quotas. This design is most appropriate when the past experience and judgment of a project director suggest that sample biases are likely to be small relative to the precision of the measuring instrument and the decisions which are to be made.

The primary sampling units employed derived from NORC's 1958 Master Sample. The primary sampling units in the Master Sample had been selected with probabilities proportionate to their estimated 1958 populations. Population shifts in the past decade have rendered that set of PSU's a less efficient primary stage than it was when initially selected. Nevertheless, since a well-trained and experienced field force was available in that set of PSU's it was obviously desirable to update the sample by some procedure which minimized the number of sampling units which needed to be changed. A procedure suggested by Nathan Keyfitz was employed.¹ It involved the comparison of the desired 1960 probabilities of selection for PSU's to their original 1950 probabilities. If the originally selected PSU had a lower original probability than was warranted by its 1960 population, it was retained in the new sample and assigned the desired probability. If the originally selected PSU had a higher probability than was now warranted, it was subjected to the possibility of being dropped. The probability of retention for such a PSU was the ratio of its desired probability to its original probability. Replacements for dropped PSU's were made from among those PSU's which had not fallen into the 1958 sample and for which the 1958 probability was lower than that desired in 1960, the probability of 1960 selection being a function of the amount of growth the unit had undergone.

Basically, this method preserves the stratification based on the 1950 classifications of geographic regions, size of largest town, median family income, economic characteristics, and in the South, by race. Counties which the Census Bureau classified as non-metropolitan in 1950 but as metropolitan in 1960 were, however, shifted to metropolitan strata. This stratification complicated the computation of selection probabilities but, in all likelihood, served to increase somewhat the efficiency of the sample.

The current set of PSU's is to be used until the 1970 census is available. For this reason, the 1960 census figures were extrapolated to 1967, the mid-point between the availability of the 1960 and 1970 census reports. For each PSU, the extrapolation was based on its population change between 1950 and 1960.

Selection of Sample within PSU's

Localities: Within each selected PSU, localities were ordered according to cities with

¹Nathan Keyfitz, "Sampling Probabilities Proportional to Size," *Journal of the American Statistical Association*, XLVI (March, 1951), pp. 105-109.

block statistics, other urban places, urbanized Minor Civil Divisions, the non-urbanized MCS's, with the places ordered by 1960 population within each of these categories. Localities were selected from this list using a random start and applying a designated skip interval to the cumulative 1960 population. This provided stratification according to size and urban type of locality, and at the same time selection with probability proportionate to size.

Where available, 1960 Census block statistics were used. Blocks were selected with probabilities proportionate to the population in the block. In places without block statistics, Census enumeration districts were selected with probabilities proportional to the number of households. The selected districts were then divided into segments and estimates of the number of households within each segment were obtained by field counts. The selection of segments was then made with probability proportionate to the number of households.

The average cluster size in Amalgam Surveys is 3.5 respondents per cluster. This seems to provide a suitable balance of precision and economy. Although sampling errors cannot be computed directly since this is a quota sample, one can make estimates of variability using procedures such as those outlined by Stephan and McCarthy.² Past experience would suggest that for most purposes this sample of 1,500 could be considered as having about the same efficiency as a simple random sample of 1,000. Thus, in the simple binomial case, the observed percentages would have the following sampling errors:

<i>Observed Percentage</i>	<i>Estimated One Standard Error</i>
50%	1.6%
40 or 60	1.5
30 or 70	1.4
20 or 80	1.3
10 or 90	0.9
5 or 95	0.7

At the block or segment level, the interviewer begins her travel pattern at a random dwelling unit which has been previously designated and proceeds in a specified direction until her quotas have been filled. In the South, segments have been selected by race of respondent. This has been done since accuracy of response is increased when Negroes are interviewed by Negro interviewers in the South. Elsewhere, the interviewer is given no race quotas.

The quotas call for approximately equal numbers of men and women with the exact proportion in each location determined by the 1960 Census. For women, the additional requirement is imposed that there be the proper proportion of employed and unemployed women in the location. Again these quotas are based on the 1960 Census. For men, the added requirement is that there be the proper proportion of men over and under 30 in the location.

These particular quotas have been established because past experience has shown that employed women and young men under 30 are the most difficult to find at home for interviewing. Although the interviewer can interview at any time, the quotas cause a large number of interviews to be made on weekends and in the evening.

² Frederick Stephan and Philip McCarthy, *Sampling Opinions* (John Wiley & Sons, New York, 1958), Chapter 10.