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A COMPARISON OF ANXIETY LEVELS OF PARTIALLY SIGHTED AND TOTALLY BLIND ADULTS

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Anxiety levels of partially sighted were compared with totally blind people. Using the Anxiety Scale for the Blind, the primary hypothesis tested was that the partially sighted would manifest more anxiety than would the totally blind.

The study was designed to ascertain whether the primary hypothesis would hold within the structure of this study, and to obtain information useful in future anxiety studies of the visually handicapped.

A residential center for the blind furnished subjects, facilities, and biographical data.

The primary hypothesis lacked statistical significance at the .05 level as did comparisons of anxiety levels by age, sex, economic need, and age at onset. The use of a different instrument may be indicated for future studies.

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A COMPARISON OF ANXIETY LEVELS OF PARTIALLY SIGHTED AND TOTALLY BLIND ADULTS

Introduction

The problems faced by partially sighted and by totally blind individuals are many and varied. Authorities disagree about the relative anxiety levels of these two segments of the population. For example, while some authorities believe that persons with partial sight have an advantage psychologically over persons with no sight, the opposite point of view has also been advanced. Statements are often made relating the degree of loss of sight to anxiety levels, but these statements are neither generally supported by nor refuted by published research.

The lack of published research aimed specifically at this question became evident during attempts to conduct a search of the literature. Additional searches were made by the American Psychological Association (Psychological Abstracts Search and Retrieval Service) and by Medline, the medical profession's service, which is similar. The primary emphasis of published reports concerning the visually handicapped thus far has concerned vocational or rehabilitation training or medical aspects of diagnosis and treatment.

Only a small amount of research which makes a psychological

comparison between partially sighted individuals and those who are totally blind has been published.

One report (Miller, 1970) which directly compares partially sighted with totally blind persons deals only with younger adolescents. Miller, whose subjects were residents of a high school for the blind, found no significant difference between the anxiety levels of partially sighted adolescents and totally blind adolescents using the Anxiety Scale for the Blind (Hardy, 1966). He did, however, find a significant difference between the anxiety levels of the ninth and tenth graders and those of the eleventh and twelfth graders, with higher levels in the latter group. This aspect of Miller's work would lend support to the position that the visually handicapped tend to develop increased anxiety with age, a condition possibly brought about by increased demands made upon them by society and the environment in general. These demands may be more overwhelming for the partially sighted than for the totally blind, a hypothesis to be tested in this study.

Another report that lends support to the position that anxiety levels increase with age for the visually handicapped is a dissertation by Hardy (1966). His study revealed no significant relationship between visual acuity and total anxiety scores on the Anxiety Scale for the Blind (ASB), which he developed; but he did find a positive relationship between age and manifest anxiety.

Miller and Hardy are in agreement on two points as a result of their separate research efforts. First, neither finds any significant differences on the ASB between the partially sighted and the totally blind. Second, each notes that anxiety, as measured by the ASB, tends to increase with age among blind residential school students.

Since both of the above studies were concerned with adolescents, they may not be relevant to this present study which deals with older adolescents and adults. A fair assumption at this point is that little is known, judging from the literature, about the comparative anxiety levels of partially sighted adults and totally blind adults.

Many difficulties are inherent in researching a hypothetical construct such as anxiety. Controversy surrounds the various instruments purported to measure the construct. This may help account for a gap in the knowledge of workers with the visually handicapped adult about the role anxiety plays in adjustment. It is generally accepted that anxiety is an expected concommittant of visual loss. Some writers such as Kurzhals (1970) attempt to give reasons for the anxiety itself.

Another difficulty to be considered in a study on manifest anxiety of the blind population is the overwhelming number of causes for blindness. For the most part this study has not dealt with the various types, degrees, and causes of blindness. Instead, the focus has been to

determine whether or not there are significant differences between the levels of anxiety of partially sighted and totally blind adults. In other words, does reduction in visual acuity result in a corresponding increase in manifest anxiety? If this main question can be answered, the result would be more understanding of the total visually handicapped population.

Because totally blind individuals are past the point of choice and must accept their handicap, they might manifest less anxiety than would partially sighted individuals who must compete in a sighted world. Added to the burden of the partially sighted is the realistic dread of further reductions in visual acuity with age. These assumptions, although they seem logical, may not be accurate. A study of recently blinded adults and their reaction to their plight (Fitz-gerald, 1970) revealed that an unexpectedly large number of these adults reduced the anxiety through the mechanism of denial. Whether long-range studies would find the same adults in the same frame of reference is yet to be determined.

Totally blind persons are much more apt to receive and accept assistance than are partially sighted persons. Totally blind people themselves reveal that carrying a cane or using a guide dog makes a difference in the amount and type of help they receive. This ready assistance should help reduce anxiety for them. These and other factors should be especially true of adults who feel a need to be productive.

In order to answer the questions posed above, it was necessary to measure anxiety levels of a number of subjects, some legally blind (partially sighted) and some totally blind. A rehabilitation center for the blind willingly cooperated in this project (This rehabilitation center wishes to remain anaonymous. It will be referred to throughout the remainder of this thesis as the Center.) The population of the Center consists of almost equal numbers of partially sighted and totally blind residents. The administrators of the Center allowed this study to be conducted on the premises, with the stipulation that residents be given the opportunity to refuse to participate or to withdraw from the study if they chose to do so. Some of the methods chosen for conducting this study are the direct results of requests from the staff The staff made these requests in order to find at the Center. the answers to questions of importance to them and in order to conduct the research in a manner compatible with their strict rules of confidentiality.

In the answering of questions for the staff at the Center, various groupings of the results were based on biographical and diagnostic data. These groupings, which are reported in addition to the examination of the data as they pertain to the primary hypothesis, are commented on only briefly. It is beyond the scope of this preliminary study to analyze the many variables affecting this limited population, especially in view of the few subjects available for measurement. However,

upon conclusion of data gathering for this project, there are plans to continue gathering data with the help of the staff at the Center for a future, expanded study.

It is important to recognize that uncontrollable variables are contributing factors to anxiety levels. They necessarily contaminate the results of this study and should be taken into account in interpreting the results.

For the purposes of this study, the primary hypothesis to be tested is that partially sighted residents of this Center will manifest higher levels of anxiety (operationally defined as a score on the ASB) than will totally blind residents. Other variables such as age, sex, and so forth will be evaluated as additional data of interest to future research. However, no hypothesis is made concerning these variables.

Method

The primary purpose of the present study will be adequately accomplished by one administration of the chosen measure, the Anxiety Scale for the Blind (ASB). For the benefit of the Center, a posttest will also be administered. The posttest, which will be administered by staff at the Center, will not be dwelt upon in this present study. The purpose of the posttest is to supply information to the Center on the results, if any, of their rehabilitation program on the residents' levels of anxiety. The primary goal of this study, however, will be to evaluate only the result of the pretest. By using only the pretest results, contaminating variables

such as those resulting from counseling, rehabilitation training, institutionalization, and other treatment residents receive at the Center will be avoided.

Subjects

Residents entering this rehabilitation center typically arrive in groups of six to ten on the first Tuesday of each month. During the present study, both males and females were given the option to participate. The only entering residents systematically excluded were one group of fourteen deaf persons who would not have been able to hear the recorded test and three residents who were retarded beyond the level required to comprehend the test items. A total of thirty-six residents, ranging in age from eighteen to sixty-nine years, were included in the study. Their age, sex, and degree of sight are summarized in Table 1.

TABLE 1

AGE, SEX, AND DEGREE OF BLINDNESS

Group	Number	Mean Age	Median Age
Partially Sighted Male Partially Sighted Females Total	6 11 17	39.0	41.0
Totally Blind Males Totally Blind Females Total	13 6 19	24.7	21.0
Total Males Total Females Total	19 17 36	37.0	24.5

As can be seen in Table 1, the subjects were almost evenly divided between the partially sighted and totally blind as well as between males and females.

For the purposes of this study, "partially sighted" is defined as visual acuity in the better eye with best correction which does not exceed 20/200 or a defect in the visual field so that the widest diameter of vision subtends an angle no greater than 20 degrees. "Totally blind" is defined, for the purposes of this study, as a lack of useful vision.

Newly arriving residents are occupied the first week in attending an orientation program. Testing is begun for the Center on the first Tuesday after their arrival. The ASB was administered the first Monday after their arrival.

Access to files and other biographical data of these new residents was granted on the condition that rules of confidentiality of residents was granted on the condition that rules of confidentiality of residents and the Cenber be strictly observed.

Instrument

Choice of an instrument with which to measure manifest anxiety was difficult because of the handicap of the subjects to be tested. Three scales were considered: the Taylor Manifest Anxiety Scale (MAS), the State-Trait Anxiety Invetory (STAI), and the Anxiety Scale for the Blind (ASB).

To aid in proper choice of an instrument for this study, a review of the difference between "State" and "Trait" was made. Thorough discussion of manifest anxiety is beyond

the scope of this study. It is desirable, however, to consider that the more stable trait anxiety is more relevant to this study than the more unstable state anxiety as described by Spielberger, Gorsuch, and Lushene (1970). In other words, how the subjects generally feel is more important to this study than how they feel at a given moment in time.

Final choice was made in favor of the Anxiety Scale for the Blind (ASB) for several reasons. The ASB was the only test available which was published and designed for use with the visually impaired. The ASB would not have to be validated against an established scale in order to use it in an oral, recorded form because it already is an oral test and the validation studies have already been completed. The author of the ASB stated that "Empirical validity of the scale is indicated by a correlation of 0.742 with the Taylor Manifest Anxiety Scale (MAS). This correlation held over a three-week retest period" (Hardy, 1968, p. 3). This correlation is quite high considering that the items are worded differently, i.e., slanted toward problems of the visually handicapped. The ASB has not been validated against the STAI, but the wording of the items places the ASB more in tune with the trait scale of the STAI than with the state scale.

The ASB was also selected because standard instructions for administering and scoring the test in oral form are included. Another important reason for choosing the ASB is that it is preferred by the psychometric staff at the Center.

They are familiar with the scale, its development, and its acceptance as a useful tool by the American Foundation for the Blind. A final reason is the face validity of the test for the use to which it will be applied in testing the visually impaired.

The ASB is probably not an ideal instrument for use in the measurement of manifest anxiety, but at the present it appears to be the only viable choice, since no other test is specifically designed for this rather limited group of subjects. The ASB is admittedly an experimental instrument. data collected in this study will be furnished the author of the test, as he has requested, to broaden normative information. Anxiety is considered by most authorities to be a hypothetical construct, operationally defined as a score on an anxiety scale. Face validity and construct validity are about all that can be confidently claimed for any anxiety scale. According to Hardy (1968) the ASB contains items clinically judged by psychologists in work for the blind to be effective measures of manifest anxiety among blind and partially sighted These experts, psychologists and rehabilitation authorities involved in work for the blind who held the Ph.D. degree or diplomate status, had a minimum of five years work experience with the blind.

Tape recording the scale

The ASB, including standardized instructions, was recorded on Memorex 120 cassette tape using recording facilities in the

Department of Education, North Texas State University. Standardized instructions for the test were recorded first; then there was a pause of 15 seconds before the items were recorded. The first three items were followed in 3 seconds by a reminder, "False on the left, true on the right." A pause of 15 seconds was held between items, giving the subjects time to respond. (The list of items is included as Appendix A.)

Response cards

Sets of response cards, which were durable, reusable, and of heavy material, were prepared by the staff at the Center. These sets consisted of 78 cards, 3 by 5 inches in size, with 1 card for each item. Each card was identified with both braille and a large number in black on the white card.

Scoring sheets

A scoring and response-recording sheet was produced for convenience in scoring the individual's responses. The sheet provided spaces for recording responses which the subjects made with their response cards, total score, and identification number or name. The examiner was responsible for recording the data on the scoring sheets. (The scoring sheet is reproduced as Appendix B.)

Biographical data sheets

A biographical data sheet was used to obtain information systematically about the individual subjects that was necessary for statistical groupings and interpretation of the data obtained during the study. (The biographical data sheet is included as Appendix C).

Testing conditions

Subjects were tested in small groups of 6 to 10 each.

A soundproof conference room, 30 by 15 feet in size, was used.

Subjects were seated around a conference table, with ample space between them to avoid mixing of cards. No disturbances were allowed during testing. In order to facilitate reading of the large print on the cards by those with partial sight, the room was brightly lit with all available flourescent lights.

A staff psychometrist was present during the first test session to assist in keeping the cards in order for the examinees as well as to make sure that there was no confusion about response procedure. The psychometrist also was there to gain training in the procedure of testing and to provide continuity for the posttest the Center staff would administer at a later date.

The cassette recording of the test items was played to the subjects on a Wollensak 2520 AV Cassette recorder/player. The settings for the playing were full treble and 5.5 volume, a setting which proved to be compatible with all groups.

Administration of the pretest

The pretest test, administered the Monday following the Tuesday the subject group was admitted to the Center, was given after a week of familiarization with the facility, but prior to any other routine testing dome by the Center.

The examiner first established rapport by meeting the group, describing briefly the purpose of the study, and assuring the respondents of the confidential handling of the data collected. They were told that the test was to determine their usual reactions to the world around them. The word "anxiety" was not used in any of the discussions or instructions. A statement was read to the subjects to prepare them for the recorded instructions. (This statement is included The response cards were then distributed to as Appendix D.) each respondent, with a rubber band around them to avoid accidental spills or mixing. The respondents were reminded not to remove the rubber bands or to play with the cards. They were also told, as the cards were being distributed, that each tenth card had a hole punched in it to help in keeping the cards in order.

The recording of the test was played immediately after the sets of cards were distributed. The examiner was primarily responsible for watching for signs of confusion or mixing of the cards. This did not, however, seem to present a real problem for these subjects.

At the conclusion of the test, the subjects were asked not to disturb the stacks of cards but to leave carefully. The examiner then recorded the responses on the scoring sheets and then immediately transferred them onto the biographical data sheet for convenience in making further tabulations.

It is important to point out that using the response card procedure is a departure from the instructions offered in the test booklet. The original instructions by the test author called for the use of a roll of theatre tickets, numbered at each end, with V notches and perforated ends. There were to be enough rolled tickets for the 78 items on the test. Holes were to be punched in every tenth ticket. For the purposes of this study, the Center requested that the responsecard method be used, since it was a more convenient method and was consistent with the response requirements of all the other tests in a battery to be administered to these same respondents. Standardized instructions were also altered to account for this minor change in procedure. Although other users of this measure allowed partially sighted respondents to use the scoring sheet directly, the use of response cards by all respondents seems to be more consistent and less confusing.

Scoring the test

A score was obtained for each subject by adding the responses indicating anxiety. This one-number score was

recorded in the proper blank at the top of the scoring sheet, and later transferred to the proper blank at the top of the biographical data sheet.

For statistical handling, the scores were treated as continuous scores. It was not practical to divide the scores into high and low anxiety levels due to lack of normative data for this population.

Results

For the purposes of this study, subjects fall into two primary groups—partially sighted and totally blind. Scores on the ASB by these two groups were compared using the \underline{t} technique to test for differences between independent means. Significance at p4.05 was required to reject the null hypothesis for each \underline{t} test reported.

Statistical computations involving various groupings are similarly reported both because the Center requested them and because they may be useful in focusing attention on possible future expansion of this study.

Analysis of variance within such heterogeneous groups as these would require many more subjects (Winer, 1971) than were available at this time. Continuing to collect data at this Center may eventuate in such data treatment.

The hypothesis for this study is that the partially sighted group will manifest more anxiety than will the totally blind group. Four additional \underline{t} tests are reported. These are based

on groupings according to current age, sex, economic need, and age at onset of the disability.

Computation of the data collected reveal (Table 2) that the primary hypothesis is not supported in this study. If there is a significant difference between partially sighted and totally blind people in their levels of manifest anxiety, it was not discovered in this study.

TABLE 2
STATISTICAL COMPARISON OF SCORES ON THE ASB

Groups	N	X	SD	df	t
Partially Sighted Totally Blind Total	17 19 36	20.06 17.37	12.30 10.31	34	0.7138
Age Below Median Age Age Above Median Age Total	18 18 36	17.00 20.28	11.98	3 4	0.8742
Males Females Total	19 17 36	16.74 20.77	9,30 12,98	34	1.0788
Economic Need No Economic Need Total	20 <u>16</u> 36	18.60 18.69	9.62 13.27	34	0,0229
Congenital Onset At Later Age Total	16 20 36	16.81 20.10	12.74 9.92	34	0.8713

Table 2 also shows statistical computation results which indicate no significant difference could be found in other groupings of the data from this study. In stating that no significant differences were found in the groupings of the test scores of this study, it was not intended to insinuate that nothing of importance was gleaned. Each of the comparisons will be discussed below with attention given to implications of the findings.

It becomes apparent, upon inspection of the data, that heterogeneity of scores, as reflected by the large standard deviations, may have contributed to the failure of this study to find significant differences between totally blind and partially sighted persons. Also the limited population at the residential center may not have been representative, particularly since the requirement that subjects volunteer may have selectively eliminated those with high anxiety. Future research at the Center probably will include the development of a longer test, with less obvious items, which will measure both "state" and "trait" anxiety. Another factor which apparently needs to be controlled is group influence. Future testing will be on an individual basis instead of in groups. This study also demonstrates the possibility that institutionalized, visually handicapped subjects may be more homogeneous than is desirable in order to generalize the results for outside populations. There are indications that future studies should include people who are functioning in the

outside world, instead of limiting the study to persons living in a relatively protected environment such as the Center. This study was intended as a pilot study in the area of psychological concommitants of visual handicaps, especially anxiety. To that end, it has contributed to future direction of research.

In summary, the results of this study, when analyzed statistically, yield nonsignificant differences among the groups. Therefore, the hypothesis is rejected and the other comparisons gave no real indications for future research.

Discussion

The results of this study did not support previous beliefs of the author. They seem to indicate that the results of Hardy (1966) may have occurred, in part, because of differences in his population compared to the one used for this study. He used younger residents of a school for the blind. Data in the present study show even less difference in anxiety level. It is impossible to determine whether the slight trend in Hardy's study was a result of the use of younger subjects than employed in the present study or due to chance alone.

If this research should be continued with a broader sample of subjects, different results might possibly occur. For example, using a population of individuals who are not in a residential center but functioning in the outside world where they are competing with sighted persons might affect the

results. There exists at the Center a supportive atmosphere which may have affected anxiety levels in the present study. Many of these residents have waited a year or more for this rehabilitation opportunity. Testing them for anxiety a week after arrival may result in an effect on ASB scores.

Individual testing might be preferable to the group procedures used in this initial study. The author observed several characteristic behaviors during group testing. The behaviors observed could be described as quiet, reserved, and perhaps disinterested during testing sessions. There was also a certain amount of difficulty in determining the amount of attention to the examiner, probably due to a habit of blind persons of not looking at speakers in conversation. These subjects also exhibited intense concentration not expected in normally sighted groups. It is therefore conceivable that a group effect may have been exhibited in attempts to respond in a way acceptable to the group--remembering that the partially sighted were grouped with totally blind subjects for testing purposes. If in future research it is necessary to test in groups, then perhaps the partially sighted and the totally blind should be tested separately.

Finally, the primary emphasis in this study stemmed from a conviction that large differences would be found in manifest anxiety among different groupings as listed above. In fact, these data failed to support the conviction that there would be significant differences. Therefore,

future emphasis will be on levels of anxiety of the visually handicapped in general and on effects of various treatment and rehabilitation methods, using control groups and more scientifically structured designs. In future research it would be desirable to use a much larger number of subjects than were used in this study.

The data from this study were tabulated and analyzed statistically, and the results were discussed with two goals in mind. The first goal was to ascertain if there were information in this study not found elsewhere which could be useful to clinical and counseling psychologists who have occasion to work with the visually handicapped. The second goal was to provide rehabilitative information which would be useful to people already involved in working with the visually handicapped in residential centers for the blind.

Although the primary hypothesis was rejected, the lack of significant differences between partially sighted and totally blind individuals and other comparisons may prove useful in helping satisfy both goals above. The most important contribution of this effort, however, seems to be in helping channel future research energies into more productive directions. Another positive result has been to furnish a small amount of additional normative data to the suppliers of the test at their request. Finally, much has been learned concerning the peculiar problems associated with assessment of the visually handicapped.

At this point, the author is ambivalent about the question of anxiety level differences between partially sighted and totally blind people. Although this study of a residential center population failed to indicate significant difference, the vast majority of visually handicapped people are not residents, but function competitively in the outside The author agrees with Hardy (1966) that although he found the difference between groups based on visual acuity to be a non-significant variable, there were some differences and they should be explored. Even though it is more difficult to obtain data on nonresidential subjects, the data from this present study indicate that anxiety differences between partially sighted and totally blind individuals may not be detected unless such a population is used. It is, of course, possible that no difference exists. The present study will hopefully help to point out ways to make future explorations yield more useful data.

Appendix A

ANXIETY SCALE FOR THE BLIND (ASB)

Instructions

This is an inventory of your experiences and feelings. There are no definite right or wrong answers. You have a stack of cards on your desk. Pick up the top card for each statement which is read to you. If the answer seems mostly true to you, place the card on the right of your desk. If the answer to the question seems mostly false, place the card on the left of your desk.

Responses Which Indicate Anxiety:

(True or False)

- True 1. I often worry about losing my hearing.
- False 2. I almost always trust the people who guide me.
- True 3. I frequently get upset because I feel closed in.
- True 4. Crowds often make me nervous.
- True 5. I am frequently embarrassed by my clothes.
- True 6. I am uncomfortable when I must eat with sighted persons.
- False 7. I don't worry about making new friends.
- False 8. I don't think people see me blush very often.
- False 9. I am usually at ease at social get-togethers.
- True 10. I would say that blindness has completely ruined my life.
- False 11. I am usually at ease when meeting people.
- True 12. I would say that people often avoid shaking hands with me.
- False 13. I enjoy being with a group.
- True 14. I worry about my appearance often.

- True 15. I refuse to carry a cane because it make me appear helpless.
- False 16. I am usually at ease with my sighted friends.
- True 17. I worry about succeeding when I get out of school.
 - 17. I worry about succeeding in the future (Modification for adults).
- True 18. I often have a nervous stomach.
- True 19. I would say that in most cases blind people should marry other blind people.
- True 20. I usually have trouble making decisions.
- False 21. I rarely have difficulty getting to sleep.
- True 22. I often feel under strain because I must stay alert.
- True 23. I worry about having to depend on others.
- True 24. I would say that it is difficult for me to forget about a disagreement.
- True 25. I often worry about making a living.
- True 26. I fear that I will never be financially secure.
- True 27. I feel out of place in most groups.
- False 28. I take part in group activities frequently.
- True 29. I would say that blindness is a personal punishment.
- False 30. I don't worry about being blind.
- True 31. I would not date a sighted person.
- False 32. I don't fear getting a job.
- True 33. Frequently, my rate of breathing seems to increase when I am talking to people I don't know well.
- True 34. When walking alone, my heart often starts to pound.
- True 35. I have a strong tendency to agree with what people say.
- True 36. My hands are frequently unsteady.

- True 37. I would say that I often feel unwanted when with my blind friends.
- False 38. Sighted people rarely make me feel useless.
- True 39. I am overly irritable.
- False 40. My power of concentration is almost always good.
- True 41. I often find it difficult to express my ideas when in the company of sighted people.
- True 42. Noises often make me nervous.
- False 43. I like to undertake new tasks.
- True 44. I frequently feel tension in the back of my neck, especially when I am in unfamiliar surroundings.
- False 45. I don't seem to make more mistakes when I am in a hurry.
- True 46. Very small setbacks worry me.
- True 47. When I am forced to be inactive, I like to have something, such as a stylus, in my hand.
- True 48. Frequently, I am too tense to study effectively.

 Frequently, I am too tense to remember what I read or what is read to me. (Modification for adults).
- True 49. Frequently, when I am with sighted persons I have trouble with my words.
- True 50. I am overly concerned about hanging objects such as store awnings.
- True 51. In familiar surroundings, I sometimes have a feeling of being absolutely lost.
- True 52. I often worry about the future.
- False 53. I don't daydream too much.
- True 54. I frequently worry about my facial expressions.
- False 55. I have about the same number or fewer fears than my blind friends.
- True 56. I have to be cautious in the company of sighted people.
- True 57. Because I cannot see, life is a constant state of stress.

- True 58. When I think people are watching me, I sometimes break out in an annoying sweat.
- False 59. I enjoy new and different adventures.
- True 60. I constantly think and often talk about being able to see well.
- False 61. I am rarely embarrassed by uncontrollable facial muscle movements.
- False 62. I am rarely nervous about something I have said.
- False 63. Most of the time, I am confident in my ability.
- True 64. I am more irritable when I am with sighted people than when I am with blind people.
- True 65. I frequently feel uneasy about competing with sighted people.
- True 66. Frequently, when I can't find things, I get upset.
- True 67. I am overly annoyed by daily frustrations.
- True 68. I am overly sensitive about my physical condition.
- True 69. I often fear getting lost.
- True 70. Frequently, I feel that a familiar room has changed shape.
- False 71. I am rarely embarrassed.
- False 72. I don't often express regret for what I do.
- False 73. I do not mind asking sighted people for help.
- True 74. I often worry about looking ridiculous to sighted people.
- True 75. Often I am not polite to sighted people.
- True 76. At times, I feel totally unnecessary.
- False 77. I would say that blind people are the masters of their own future.
- False 78. I would say that people appreciate me for my own accomplishments.

Appendix B

Scoring Sheet

name or number					score_		
		Responses	indi	cating	anxiety:		
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	TFTTTTFFTTTT	responses.	27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38.	T F T F T T T F T F T F		53. 54. 55. 56. 57. 59. 61. 62. 63. 65.	FTFTTTFFFFTTT
14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25.	TFTTTTTTTTT		41. 42. 43. 44. 45. 46. 47. 48. 50. 51.	T T F T T T T T		67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77.	TTTTFFFTTTFF

Appendix C

BIOGRAPHICAL DATA SHEET, ARNOLD ZEAGLER STUDY ON USING THE ANXIETY SCALE FOR THE BLIND (ASB) COMPARING PARTIALLY SIGHTED WITH TOTALLY BLIND.

Name/number of examinee:	PretestPosttest
Check one: Partially sighted (Totally Blind ()
Date of birth: Mo DayYear	; Age
Check one: Female () Chec Male ()	ck one: Married () Divorced () Single () Widowed ()
Age at onset of visual handicap:	or Month/Year
Cause of the visual handicap:	
Other handicaps, nonvisual:	
Occupation:	
Educational level:	
Comments: (Anything judged to be pertinen	nt to this study)

Appendix D

To be read to the examinees to prepare them for the recorded test instructions.

EACH OF YOU WILL HAVE A STACK OF CARDS PLACED IN FRONT OF YOU ON THE TABLE BEFORE WE BEGIN. IT IS IMPORTANT THAT YOU DO NOT MOVE THEM OR GET THEM OUT OF ORDER. THEY ARE NUMBERED ONE THROUGH SEVENTY-EIGHT IN BOTH BRAILLE AND LARGE PRINT. THE RECORDING YOU WILL HEAR WILL INSTRUCT YOU HOW TO USE THE CARDS TO ANSWER THIS EACH ITEM WILL BE EITHER TRUE OR FALSE. OUESTIONNAIRE. YOU WILL PLACE THE CARD TO THE LEFT IF IT IS FALSE, TO THE RIGHT IF IT IS TRUE ABOUT YOU. AT THE END OF THE EXERCISE, YOU WILL HAVE TWO STACKS OF CARDS, THE FALSE ONES ON YOUR LEFT, THE TRUE ONES ON YOUR RIGHT. DO YOU HAVE ANY QUESTIONS? IF YOU GET CONFUSED DURING THE EXERCISE, RAISE YOUR HAND OR SPEAK UP, AND WE WILL STOP UNTIL YOUR QUESTION IS ANSWERED. NOW, PLACE YOUR HAND WHERE YOU WILL PLACE THE TRUE CARDS. WILL NOW DISTRIBUTE A SET OF CARDS TO EACH OF YOU.

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