

1-1991

AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS

JONATHAN Hackbarth
Gallaudet University

GEOFFREY MATHAY
Gallaudet University

Follow this and additional works at: <https://repository.wcsu.edu/jadara>



Part of the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Hackbarth, J., & MATHAY, G. (1991). AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS. *JADARA*, 24(3). Retrieved from <https://repository.wcsu.edu/jadara/vol24/iss3/9>

AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS

JONATHAN HACKBARTH
and **GEOFFREY MATHAY**
Gallaudet University

Abstract

Two work values assessment instruments, the Values Scale (VS) and the Minnesota Importance Questionnaire, adapted for use with hearing-impaired persons (MIQa), were evaluated for use with hearing-impaired college students. Both instruments were given to 157 hearing-impaired college freshmen and sophomores. Results indicated low to moderate Pearson Correlation Coefficients between comparable VS and MIQa items. Ranking of comparable values items between instruments was inconsistent. Validity of either or both instruments for use with hearing-impaired students is in question due to concerns relating to the paired-form format of the MIQa and the vocabulary of the VS. Further research is recommended.

the College Placement Council. Within this counseling paradigm, a comprehensive assessment of values, interests, and skills occurs during the first stage, called Awareness. Gallaudet career counselors have recognized the need for assessment instruments that will accurately portray the values of students who are hearing impaired.

Several instruments measuring vocational stereotyping of hearing-impaired subjects have been researched, but very little attention has been given to instruments designed to test vocational/career values (Holm, 1987).

The use of pencil-and-paper questionnaires and inventories to help clients assess their career goals is a common practice for career counselors, vocational evaluators, and rehabilitation counselors. The use of these tools is a common practice, because these counseling tools are readily available, fairly inexpensive, and are less time-consuming than other methods of evaluation (Bannowsky, 1983; Eber, 1976).

Several of the vocational assessment instruments used by professionals involve comparing the individual's questionnaire results with normed group profiles to obtain plausible career goals which may be appropriate for the individual to begin investigating. Instruments such as these may assess personality factors, career interests, and even career maturity. The inherent problems in using these types of assessment tools with deaf individuals is that the normative group is comprised of hearing individuals. Specific concerns expressed are that: (a) reading levels of most tests are too high (b) tests reflect cultural and experiential opportunities which may be attained to different degrees or in different ways by the deaf population (c) test

Introduction

The first step in the career decision-making process is the assessment of work-related values, skills, and interests. Attainment of job satisfaction is predicated on successfully identifying these traits (Lofquist and Dawis, 1984; Super, 1984). Many standardized tests have been developed to assist individuals in discovering their career personality; however, these instruments are generally not appropriate for use with deaf persons due to language and cultural biases (Holm, 1986; Levine, 1974, 1981; Vernon, 1967; Watson, 1979). The purpose of this paper is to evaluate two values assessment instruments for use with hearing-impaired college students and to begin establishing normative data for this population.

At Gallaudet University, career counselors employ a six-stage career development model founded upon theoretical constructs supported by

AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS

questions are based on the assumption the testee can hear and (d) normative groups do not include deaf persons in the sample and have no normative groups comprised specifically of deaf people (Levine, 1981; Zieziula, 1983).

As one highly respected professional stated:

"If one were to eliminate from consideration all tests that do not have norms for hearing-impaired people...we would, in effect, stop using standardized instruments to evaluate this group of people...What we can do is be very cautious about interpreting results of clients who do not mirror individuals for whom the test was designed" (Zieziula, 1983, p. 3).

This sentiment is expressed by other authors who have experience with vocational/career assessment instruments. Bannowsky (1983), in an assessment of the Sixteen Personality Factor, Form E (16PF-E), suggests that the normed group profiles be used for comparison purposes only when taking into account the particular nuances associated with prelingually deaf clients. Farrugia (1983) and Holm (1986) conducted similar assessment studies using adapted versions of the Wide Range Interest and Opinion Test (WRIOT) and the Minnesota Importance Questionnaire (MIQ), respectively. Both suggest caution when using standardized instruments with hearing-impaired populations. Holm states that counselors feel existing instruments are inadequate for use with deaf persons, and that standardized testing as a whole is often considered of little value and is sometimes harmful.

The advice we are receiving from our fellow professionals, it would seem, is to: (a) readjust our research focus away from hearing/deaf comparisons and towards the establishment of norms for the hearing-impaired populations, (b) continue to revise current instruments and the administration of these instruments to better fit the unique characteristics of hearing-impaired people, and (c) continue to explore the appropriateness of instruments for use with hearing-impaired people.

It is the intent of this paper to explore the feasible use of two values instruments to determine the appropriateness of their use with hearing-impaired populations, and to develop normative data for college-level hearing-impaired students.

Method

Instruments

The two instruments chosen were the Values Scale (VS) (Super & Nevill, 1986) and the Minnesota Importance Questionnaire (Weiss, Dawis & Lofquist, 1971), adapted for hearing-impaired individuals (MIQa) (Holm, 1976). The VS was chosen due to its currency (published in 1985) and its applicability to a wide range of people and cultures. The MIQa was selected because it is a values assessment instrument specifically adapted for hearing-impaired persons.

The Values Scale measures a number of both intrinsic values (e.g., altruism, prestige) and extrinsic values (e.g., economic rewards, working conditions). It contains 106 items and is scored for 21 values. Each of the 21 values scales consists of 5 items, statements to which students respond along a Likert-type scale of "little or no importance" (one point) to "very important" (four points). Scores for each value are calculated by adding the value of each response for each of the five items in the scale. The reading level is approximately eighth grade.

The Minnesota Importance Questionnaire (MIQ) was designed to measure twenty psychological needs and six underlying values found to be relevant to work adjustment (Rounds, Henly, Dawis, Lofquist, & Weiss, 1981). In the paired-comparison form, each of the 20 statements representing a different vocational need is presented in pairs with each of the remaining 19 statements. Each of the 20 statements is also rated in terms of whether it is important to the individual in its own right. Scale scores can range between -4.0 to +4.0, but almost all scores fall within the range of -1.0 to +3.0.

The MIQ also provides a measure of response consistency, termed the Logical Consistency Triad (LCT). A low LCT score would most likely

AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS

indicate random selection of responses. A high LCT score suggests sincere responses to the items. According to the MIQ Manual (Rounds, et al., 1981), "If the LCT score is above 33%, the pattern of response may be assumed to have enough consistency for interpretation..."

The MIQ was adapted for hearing-impaired persons in 1976 (Holm, 1976). The adapted version (MIQa) was developed to take into account the language differences between deaf and hearing populations. Each of the 20 original MIQ statements has been modified to make the meaning clear for deaf persons with a reading level of 3.2 or greater. The instrument was administered to 272 hearing-impaired individuals. Internal consistency reliability was measured at .83 for the 20 scales. Interscale correlations between each of the 20 scales and the other 19 scales displayed high discriminant validity (Holm, 1986).

For the purposes of this study, MIQ "needs" are considered equivalent to the VS "values." Each item was assessed regarding its vocabulary and meaning. It was determined that the VS and MIQa contain 13 comparable work value items; 4 items have less strong counterparts, and 9 items do not have counterparts. (See Table 2 for a comparison of VS and MIQa items.)

Participants

Typically, college students seek career counseling during their freshman or sophomore years. Therefore, the investigators felt that the research sample should consist of members of this group. The sample for this study is comprised of students enrolled in Gallaudet's Orientation to Career Development course, predominantly taken by freshmen and sophomores. A component of this course is the administration of assessment instruments for the purpose of identifying career values. The course provides an existing mechanism for the administration of the VS and MIQa.

A total of 158 Gallaudet University students, 67 males and 91 females, participated in the study. The mean age of the students was 20.8, SD=3.8. Students who take the course are

predominantly freshmen, 84.6% in this sample; 79.1% of the students classify themselves as deaf, 20.1% as hard of hearing. Within this sample, 17.7% reported having a deaf mother, 16.5% a deaf father, and 23.4%, a deaf sibling.

About half of the students (51.5%) attended a residential school for deaf students during elementary years, and 52.9%, during high school. The ethnic breakdown of the sample is as follows: 5.1% Asian, 7.0% Black, 4.4% Hispanic, 1.9% Native American, 79.1% White, and 2.6% unknown. The estimated reading level, based on data gathered on incoming freshmen, is approximately 8th grade.

Procedure

The participants were given both instruments during a two-week period. Approximately half of the sample was given the VS first, the other half the MIQa. The instruments were administered in the classrooms (10 sections) by the investigators. Students who missed either or both in-class administrations were given the instruments during scheduled make-up sessions. Students were instructed to ask for assistance if the vocabulary was not understood.

Demographic data were collected from a separate questionnaire after the tests were administered.

Results

Correlation Between Value Scale Items vs. MIQa Items

Do the Value Scale and the MIQa instruments show similar scores for comparable value items?

It is important to know whether or not a values measurement instrument such as the VS or the MIQa accurately measures and weighs the work values of the individual. One way to determine validity is to determine how consistently these two instruments measure comparable work value items. A Pearson Correlation Coefficient was determined for each pair of similar work value items.

The results (Table 1) show that for males, five of the 17 values pairs have coefficient scores

AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS

greater than .400; for females, coefficient scores for two values pairs were greater than .400. Each of these scores is significant at $p \leq .001$.

Do deaf college students weigh values differently between genders?

For the purposes of establishing norms for the deaf college population, it is important to determine the influence gender may have upon the weighing of work values.

f Test Between Genders of Deaf College Students, Values Scale Item Mean Scores

**TABLE 1
VS/MIQ_a WORK VALUE ITEM PAIRS WITH PEARSON CORRELATION COEFFICIENTS GREATER THAN .40**

Males	Females
Altruism/Social Service	Altruism/Social Service
Economic Reward/Compensation	Creativity
Prestige/Recognition	
Prestige/Social Status	
Economic Security/Security	

**TABLE 2
PEARSON CORRELATION COEFFICIENTS BETWEEN MIQ_a ITEMS AND VS ITEMS**

Value Scale Item	MIQ _a Item	All		Males		Females	
		r	P	r	P	r	P
Ability Utilization*	Ability Utilization	.246	.007	.137	.310	.221	.053
Achievement	Achievement	.161	.082	.145	.281	.133	.249
Advancement	Advancement	.141	.127	.200	.135	.096	.408
Aesthetics	-----	-----	-----	-----	-----	-----	-----
Altruism*	Social Service	.486	.000	.494	.000	.450	.000
Authority*	Authority	.265	.004	.307	.020	.265	.020
Autonomy	Independence	.127	.171	.321	.015	.044	.706
Autonomy*	Responsibility	.125	.179	.150	.265	.147	.201
Creativity*	Creativity	.538	.000	.374	.004	.556	.000
Economic Reward*	Compensation	.450	.000	.497	.000	.396	.000
Life Style	Moral Values	.129	.163	-.022	.869	.245	.032
Personal Development	-----	-----	-----	-----	-----	-----	-----
Physical Activity	-----	-----	-----	-----	-----	-----	-----
Prestige*	Recognition	.411	.000	.550	.000	.122	.289
Prestige*	Social Status	.412	.000	.545	.000	.223	.051
Risk	-----	-----	-----	-----	-----	-----	-----
Social Interaction	Co-Workers	.275	.003	.265	.046	.252	.027
Social Relations*	Co-Workers	.231	.012	.295	.026	.239	.036
Variety*	Variety	.297	.001	.304	.021	.210	.066
Working Conditions*	Working Conditions	.059	.529	-.034	.803	.174	.129
Cultural Identity	-----	-----	-----	-----	-----	-----	-----
Physical Prowess	-----	-----	-----	-----	-----	-----	-----
Economic Security*	Security	.249	.006	.437	.001	.110	.343
-----	Company Policies	-----	-----	-----	-----	-----	-----
-----	Supervision-Technical	-----	-----	-----	-----	-----	-----
-----	Supervision-Human	-----	-----	-----	-----	-----	-----

Note: r = Pearson's Correlation Coefficient; P = Probability Statistic; * indicates that the VS items are comparable with the MIQ_a items

AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS

A *t* test was performed to determine if the mean scores of the value items differ significantly between genders. Results of the T-test are found in Table 3.

It appears that male and female deaf college students have similar scores for most Value Scale items. Two values show a difference in mean scores significant at $p \leq .01$. Females tend to have higher scores for Altruism, while males score higher for Autonomy.

t Test Between Genders of Deaf College Students, MIQa Item Mean Scores

A *t* test was also performed for MIQa item mean scores between genders. For the most part, the item mean scores are similar between genders. Results indicate four value items whose mean scores differ between genders at the $p \leq .01$ level. Females had higher mean scores, $p \leq .01$ for all four items: Social Service, Variety, Activity, Co-workers. Full results can be found in Table 4.

Ranking of Item Mean Scores for Value Scale and the MIQa

Which work values do deaf college students feel are most important?

Earlier in this paper it was stated that, with a few exceptions, the VS and MIQa mean scores did not generally differ significantly between genders. Another way to determine differences between genders is to determine a rank-order coefficient. Based on the mean scores of each value item, a ranking is determined according to which work value items were given more importance. Tables 5 and 6 list the rank order of mean scores of items for the VS and MIQa gender groups, respectively.

For the VS items, males and females share four of the first five ranked values and eight of the first ten. The MIQa rankings are similar: genders share 3 of the first five ranked values, and nine of the first ten.

**TABLE 3
t TEST BETWEEN GENDERS USING THE VALUES SCALE**

Value Scale Item	<i>t</i> Value	2-Tail Probability
Ability Utilization	0.19	0.849
Achievement	0.01	0.991
Advancement	1.80	0.074
Aesthetics	0.09	0.926
Altruism	3.20	0.002
Authority	0.01	0.996
Autonomy	-2.16	0.033
Creativity	-1.30	0.196
Economic Rewards	-0.55	0.586
Life Style	0.89	0.376
Personal Development	-0.03	0.976
Physical Activity	0.59	0.560
Prestige	0.09	0.929
Risk	-0.98	0.329
Social Interaction	0.94	0.351
Social Relations	-0.65	0.516
Variety	1.62	0.108
Working Conditions	0.47	0.640
Cultural Identity	-0.22	0.826
Physical Prowess	-1.81	0.074
Economic Security	-0.31	0.753

Note: Positive scores indicate higher mean scores for females, negative scores indicate higher mean scores for males. Females = 83, Males = 60.

**AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS
FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS**

TABLE 4
t TEST BETWEEN GENDERS USING THE MINNESOTA IMPORTANCE QUESTIONNAIRE

Value Scale Item	t Value	2-Tail Probability
Ability Utilization	1.73	0.087
Achievement	1.31	0.193
Activity	3.27	0.001
Independence	1.56	0.123
Variety	3.59	0.000
Compensation	-0.49	0.627
Security	-0.83	0.407
Working Conditions	0.29	0.769
Advancement	-1.34	0.184
Recognition	1.23	0.222
Authority	0.66	0.508
Social Status	0.68	0.498
Co-Workers	2.58	0.011
Social Service	3.96	0.000
Moral Values	1.04	0.302
Company Policies	1.66	0.100
Supervision-Human	0.21	0.836
Supervision-Technical	1.53	0.130
Creativity	1.50	0.136
Responsibility	2.07	0.041
Logical Consistency	-0.14	0.886

Note: Positive scores indicate higher mean scores for females, negative scores indicate higher mean scores for males. Females = 73, Males = 49, LCT Scores < 33% were omitted.

A Spearman rank order coefficient did not indicate any significant differences between genders for either instrument.

Rank Order Between Instruments

Are comparable VS and MIQa values similarly ranked?

If the students responded consistently to comparable items on each instrument, the rank order of the values should be the same. Table 7 presents the rank orders between tests for those items that were judged to be equivalent. For the VS and MIQa, females share three of the first five values ranked; males share two of the first five.

Discussion

Test Administration

Despite clear explanation of the rationale for the paired-form format used in the MIQa,

students had a difficult time maintaining motivation throughout the test. Students generally complained that the MIQa items were too repetitive and in many cases responded randomly, as revealed by low LCT scores.

Students had less difficulty maintaining interest with the VS. However, this instrument, unlike the MIQa, has not been revised for use with hearing-impaired individuals, and consequently, students had more difficulty with the vocabulary and grammar.

Students preferred the Likert scale format of the VS to the paired-form structure of the MIQa. It is a concern of the investigators that students demonstrated a loss of interest while completing the MIQa due to the paired-form format. Validity and reliability of an individual's results are adversely affected by an increasingly apathetic attitude. To control for this influence, scores of persons whose LCT scores fell below 33% were not included in the statistical analysis, following

**AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS
FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS**

**TABLE 5
RANKING OF VALUE SCALE ITEM MEAN SCORES**

Value Scale Item	Rank	
	Female	Male
Ability Utilization	1	1
Achievement	2	2
Economic Rewards	3	3
Personal Development	4	4
Altruism	5	14
Economic Security	6	5
Advancement	7	10
Life Style	8	8
Prestige	9	7
Working Conditions	10	11
Creativity	11	6
Physical Activity	12	13
Social Relations	13	8
Variety	14	16
Aesthetics	15	15
Social Interaction	16	17
Autonomy	17	12
Cultural Identity	18	18
Authority	19	19
Risk	20	20
Physical Prowess	21	21

**TABLE 6
RANKING OF MINNESOTA IMPORTANCE QUESTIONNAIRE**

Value Scale Item	Rank	
	Female	Male
Social Service	1	5
Variety	2	7
Moral Values	3	2
Achievement	4	3
Creativity	5	6
Advancement	6	1
Ability Utilization	7	8
Co-Workers	8	10
Activity	9	16
Working Conditions	10	9
Security	11	4
Supervision-Technical	12	11
Social Status	13	12
Recognition	14	13
Independence	15	16
Responsibility	15	19
Company Policies	17	17
Compensation	18	14
Authority	19	18
Supervision-Human	20	20

AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS

the suggestion in the MQ Manual that scores below this level may have resulted from random responding.

Validity of Instruments

An intent of this study was to examine the VS and MIQa for validity with deaf college students. A basic level of construct validity for deaf persons has been established for the MIQa in a prior study (Holm, 1986). If individuals who take both instruments obtain equal results, there is then evidence for construct validity for both instruments.

Analyses of the instruments show that thirteen values are clearly measured by both instruments. If the instruments are, in fact, measuring the same value construct, correlations between the scores measuring these values should be high, and subjects' rankings of the values should be similar for each instrument.

In fact, the Pearson correlation coefficients generally showed low to moderate relationships between equivalent items. Students were not consistent in their responses to the equivalent items on each instrument. This inconsistency may be due in part to the vocabulary and grammatical structure of the VS or the repetitive nature of the MIQa, as mentioned above. It is also possible that some participants did not have an interest in discovering their values and, hence, may not have responded with sincerity.

The inconsistency of responses is further illustrated by the differences in the rank orders of mean scores between tests. For females, eight of the thirteen equivalent VS/MIQa items were within three ranks of each other; seven of thirteen items for males.

If one were to ask, "What are the three most important values of deaf female college students?," the results would indicate the following:

<u>VS</u>	<u>MIQa</u>
1. Ability Utilization	1. Social Service
2. Achievement	2. Variety
3. Economic Rewards	3. Achievement

Similar differences in the ranking of these mean scores would also be found in the ranking of individual scores. A career counselor, given the VS results for an individual, might suggest exploration of different fields than if given the MIQa results.

The low-to-moderate Pearson correlation coefficients and the differences between rank orders, coupled with the concerns related to the test structures, suggest that the validity of one or both instruments is in question.

Future Research

This study was not able to conclusively ascertain the appropriateness of either instrument for use with hearing-impaired college students. The primary threats to validity arise from the structure of the instruments themselves, i.e., vocabulary, grammar, and format. It is, therefore, suggested that the following research be conducted to address these concerns:

1. Compare the results obtained from the MIQa paired form with those from the ranked form. Determine to what degree the structure of the MIQa affects the individual's responses.
2. Evaluate and modify the vocabulary and grammar of the VS for use with hearing-impaired persons. Administer the modified VS to hearing-impaired college students for validation purposes.
3. Perform correlation studies between the MIQa and/or the VS with personality and interest inventories appropriate for hearing-impaired persons.
4. Perform item analyses of the MIQa and/or VS to determine reliability and validity of individual items.

**AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS
FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS**

**TABLE 7
RANKING OF COMPARABLE VS AND MIQa ITEMS BY GENDER**

VS ITEM	MIQa ITEM	VS Fem	MIQa Fem	VS Male	MIQa Male
Ability Utilization	Ability Utilization	1	5	1	6
Achievement	Achievement	2	3	2	1
Economic Rewards	Compensations	3	12	3	11
Altruism	Social Services	4	1	10	3
Economic	Security	5	8	4	2
Prestige*	Recognition	6	10	6	10
Prestige*	Social Status	6	9	6	9
Working Conditions	Working Conditions	7	7	8	7
Creativity	Creativity	8	4	5	4
Social Relations	Co-Workers	9	6	7	8
Variety	Variety	10	2	11	5
Autonomy	Responsibility	11	11	9	13
Authority	Authority	12	13	12	12

Note: The VS "Prestige" corresponds to two MIQa items. It is ranked only once within the VS list.

AN EVALUATION OF TWO WORK VALUES ASSESSMENT INSTRUMENTS FOR USE WITH HEARING-IMPAIRED COLLEGE STUDENTS

References

- Bannowsky, A. W. (1983). Issues in assessing vocationally relevant personality factors of prelingually deaf adults utilizing the 16PF-E. Journal of Rehabilitation of the Deaf, 17(3), 21-24.
- Eber, H. W. (1976). Personality and psychopathology inventories. In B. Bolton (Ed.), Handbook of measurement and evaluation in rehabilitation. Baltimore, Ohio: University Park Press.
- Farrugia, D. L. (1983, June). Career exploration with hearing-impaired students: A technique using the Wide Range Interest and Opinion Test. Paper presented at the meeting of the American Deafness and Rehabilitation Association.
- Holm, C. S. (1976). Minnesota Importance Questionnaire: A translation for the deaf. Journal of Rehabilitation for the Deaf, 2(3), 13-21.
- Holm, C. S. (1986). The validation of a form of the Minnesota Importance Questionnaire: Developed for hearing-impaired populations with limited reading skills. (Doctoral Dissertation, University of Minnesota, 1986) University Microfilms International, #8627020.
- Holm, C. S. (1987). Testing for values with the deaf: The language/cultural effect. Journal of Rehabilitation of the Deaf, 20(4), 7-19.
- Levine, E. S. (1974). Psychological tests and practices with the deaf: A survey of the state of the art. The Volta Review, 76, 298-319.
- Levine, E. S. (1981). The ecology of early deafness: Guides to fashioning environments and psychological assessments. New York, New York: Columbia University Press.
- Lofquist, L. H. & Dawis, R. V., (1984). A psychological theory of work adjustment. Minneapolis, Minnesota: University of Minnesota Press.
- Rounds, J. B., Jr., Henly, G. A., Dawis, R. V., Lofquist, L. H., & Weiss, D. J. (1981). Manual for the Minnesota Importance Questionnaire: A measure of vocational needs and values. Minneapolis: University of Minnesota, Vocational Psychology Work Adjustment Project, Department of Psychology.
- Super, D. E. (1984). Quality of life and the meanings and values of work. Educational and vocational guidance (Bulletin of the International Association of Educational and Vocational Guidance), 41, 2-8.
- Super, D. E., & Nevill, D. D. (1986). The values scale. Palo Alto, California: Consulting Psychologists Press.
- Vernon, M. (1967). A guide for the psychological evaluation of deaf and severely hard-of-hearing adults. The Deaf American, 19, 14-17.
- Watson, D. (1979). Guidelines for the psychological and vocational assessment of deaf rehabilitation clients. Journal of Rehabilitation of the Deaf, 13, 27-57.
- Weiss, D. J., Dawis, R. V., & Lofquist, L. H. (1971). The Minnesota Importance Questionnaire. Minneapolis, Minnesota: University of Minnesota Press.
- Zieziula, F. (1983). Assessment of hearing-impaired people: A guide for selecting psychological, educational and vocational tests. Washington, D.C.: Gallaudet College Press.