DEVELOPMENT AND VALIDATION OF A VOCATIONAL EDUCATION ATTITUDE SCALE

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By

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DEDICATION

This thesis is dedicated to my mother and father for their love, patience and encouragement.
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ABSTRACT

Development and Validation of a Vocational Education 
Attitude Scale

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The main purpose of this study was to develop and validate an attitude scale, to measure tenth-graders' attitudes toward vocational education. The second purpose was investigation and interpretation of the attitude under investigation in the desired population.

The main sample of the study consisted of 1161 (598 males, and 563 females) tenth graders in which classes were selected at random. The second sample consisted of 153 eleventh and twelfth graders (academic, and vocational streams), in which classes were also selected randomly. Its main purpose was to collect evidence for the validity of the scale.

The following steps were used to develop and validate the scale: 1) Collecting freely expressed views, opinions, and feelings about the object (vocational education) from the population of interest, and classifying them into categories reflecting various aspects of attitude toward vocational education. 2) Collecting a large item pool. 3) Revising, critiquing, and editing the items. 4) Selecting a response format. 5) Establishing the content validity of the items. 6) Data collection. 7) Establishing the psychometric properties of the scale through appropriate statistical analyses including factor analysis.

The attitude levels of male and female students were estimated and compared using t-tests for the group means. They were calculated on the basis of refined 37-item scale.

Thirty-seven items were selected according to the criterion of item-remainder correlation being greater than 0.40. Separate analyses were conducted for males' and females' subsamples. Results of item analysis from the total
sample as well as from the male and female subsamples were similar.

High item-remainder correlations from the total sample as well as from the male and female subsamples provided evidence for the discrimination power and construct validity of each item in the sense of items' criterion-related validity. Other statistical properties of the items such as item means, and standard deviations were acceptable.

Alpha reliability coefficient for the total sample as well as for the male subsample was 0.94, where as it was 0.95 for the female sample. These high internal consistency reliability coefficients indicate a homogeneous and reliable attitude scale.

Content validity was established through collection of items from a random sample of tenth-graders, which represent proportionately the various categories of the attitude toward vocational education.

Factor analysis was conducted on the total sample. Results of factor analysis showed that there was only one major factor with a very high eigen value (12.45), and it contains most of the variance 33.6%. The next five factors have eigen values ranging from 1.09 to 2.00 and percent of variance accounted for each factor ranging from 3.00 to 5.40. The use of scree test indicated that no more than six factors should be extracted and they accounted for 53 percent of the total variance.

The factor structure of the 37-item scale was uncovered by varimax rotated factor matrix. According to the high loadings and contents of the items, the following factors were identified: 1) A desire to join vocational education. 2) Interest in vocational works and topics. 3) Appreciation of the importance of vocational education. 4) Future of vocational education students. 5) Role of vocational education in the development of thinking. 6) Role of vocational education in achieving the objectives of the individual and society.

The results, related to the second purpose of this study, indicated that all tenth graders, in general, have negative attitudes toward vocational education. The majority of tenth graders prefer to join academic education. There are statistically significant differences in the attitudes of tenth-graders between those who opted for vocational
education and those who opted for academic education. There are no statistically significant differences among tenth graders' attitudes due to sex.

These results suggested that vocational education has a low status in society. Tenth graders are forced to join vocational education because of their low achievement level. Even vocational education students have negative attitudes toward vocational education, which reflects their unwilling participation in vocational education which is undervalued in Jordanian society.
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