Developing a Tool to Measure the Training Needs of Science Teachers in the Kingdom of Bahrain in Assessment According to the Standards of Educational Testing.

A Thesis Submitted in Partial Fulfillment of the Requirements for the Master's Degree in Educational Measurement and Evaluation

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Abstract

The purpose of study was to develop a tool to measure the training needs of science teachers in secondary schools of the Kingdom of Bahrain based on the Standards of Educational and Psychological Testing, and to investigate the relationship between teachers' ratings of their training needs and some variables of interest.

The final version of the measure included 30 items that conform to validity standards and that cover three interrelated domains in evaluation: Planning classroom assessment; Test development, administration, and scoring; and Interpretation of test results and decision making.

The developed tool was then administered to 197 randomly selected teachers in secondary schools of Bahrain, and its psychometric properties were adequately investigated. As a result, high validity and reliability indices were obtained, where reliability value for the whole measure was .97, which indicates the applicability of the developed tool to the teaching and learning settings in the secondary school.

Moreover, the study revealed statistically significant differences in the mean teachers' rating of their training needs that can be attributed to gender, in favor of males, and to training, in favor of teachers with less field training. No statistically significant differences, however, were found in the mean teachers' rating of their training needs that can be attributed to the level of educational and scientific degree, experience, and teacher's specialization.

Based on the results, the utilization of the developed tool to enhance the performance of science teachers in the field of educational assessment is recommended. The findings also serve a profound basis for designing training programs for science teachers in classroom evaluation.

Key Words: Training Needs, Standards of Educational and Psychological Testing, Classroom Assessment, Science Teacher, Kingdom of Bahrain,