

Validity and Reliability of Career Exploration Module

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Abstract: This study aims to determine the validity and reliability of Career Exploration Module which comprises of six sub modules (Personality and Working Environment Module, Dictionary of Career Module, Job Advertisement Module, Resume Writing Module, Job Application Letter Module and, Interview Preparation Module). Data was obtained through survey using two sets of questionnaire which are content validity and reliability modules. Two sets of samples involved in this study were five experts in the field of career counseling as the content validity of the evaluation panel and 30 students from semester four Community College in Malacca selected based on purposive sampling method. A pilot study data was consistently analyzed using Alpha Cronbach while data evaluation by experts was analyzed using percentages. Assessment by experts showed that all the tested modules have high content validity that exceeds .70.percent While the reliability analysis by students also showed high reliability with the Cronbach Alpha value exceeding .70. The findings conclude that all the sub modules for the Career Exploration Module have a high validity and reliability and are ready to use.

Key words: Reliability module • Validity module • Career Exploration Module

INTRODUCTION

Many modules have been developed for various purposes such as facilitating the process of teaching and learning, improve motivation, increment in the level of leadership and so on [1]. Module is a package that has something to do with the concepts contained in each unit and it helps a person to master a topic before moving on to the next sub topics [2]. Russell [3] stated that the modules can improve student performances and process modules can also be used for non-academic teaching. A module needs to be cleared in order to determine the suitability and usability. The main characteristics in determining the suitability and usability of a material or an instrument are by obtaining the validity and reliability. Validity is used to measure the accuracy of a measurement used in the study. Validity seeks to ascertain whether a measurement or indicator used that contains all new features or ideas are available in the concept that it is measured. Whereas reliability is a concept that refers to the consistency and stability of a measurement, measuring instrument, questionnaire or a

survey over time towards an idea. Reliability aims to determine whether the measurements give the same answer when it is used to measure the same concept to a population or sample or the same respondents [4].

The method in determining the reliability of a module, is similar to the method used in determining the reliability of other test devices. This is because both modules and test tools are instruments that are developed specifically for a particular purpose. If the indication of the reliability of the test or measurement instruments is determined by developed items, same thing goes for the reliability determination module [5]. To determine the reliability of a module, there are two common methods, namely through a questionnaire created by the objectives contained in modules or questionnaires created based on the steps in each activity module. Both of these methods can indirectly give a coefficient of reliability of a module. [1]. To determine the validity of module content, the method that is normally used is reference to experts. This is in line with what was said by Majid Ponting [6], in which the validity of an instrument can be determined through the eyes of experts. A module is said to have

high validity if the module can successfully achieve in accordance with the objectives of the module [1]. To determine whether a module has good validity in content, the views of Waheed Tuckman [7] and Abu Bakar Nordin [8] who stated that the level of proficiency or achievement that reaches 70 percent is considered to have achieved or reached a high level. Similarly, the study by Edward and Richard [9] stated that the minimum value of a reliability is .80. A test device that does not meet the conditions relating to the validity and reliability will be considered defective and therefore the information obtained will not be accepted, Abu Bakar Nordin [8]. A Measurement tool is considered reliable and steady when there are proof of its reliability coefficient (Julie, 1995).

Studies related to reliability and validity module in Malaysia are still low, but there are few studies that have been conducted [2, 10-18]. The findings by researchers have found that the reliability and validity of the content in modules that have been done had a high alpha Cronbach value which was more than .70. Previous researches have shown that well-built modules that meet the specifications based on the model module will have a high validity and reliability.

Problem Statements: The need to use module in a career program has been much discussed by researchers [2, 18-21]. Many studies have been conducted using a career module by previous researchers and have found to be effective [17, 18, 22-26]. The results of a study conducted among researchers have found the information that needs to be dominated by a job seeker are i) information about themselves in terms of their interests, talents, abilities, strengths and weaknesses, ii) mastery and knowledge of career information includes the job responsibilities, qualifications, training and specific requirements, including knowledge of the labor market and iii) personality information matching skills with jobs. Usually career-related information are available on the module developed [1]. The researchers also suggested that the use of the modules in the career program should be enhanced [17, 19, 23, 25-27]. To ensure that a module really works before using it, the reliability and validity of the content must be obtained [8, 28]. Thus the main objective of the study was to examine the validity and reliability of Career Exploration Module.

Methodology: This is a survey research using questionnaires as a data collection tool. Two sets of questionnaires were used which are questionnaires of

reliability and validity of the module content. A questionnaire of reliability module has been administered to students to obtain data reliability module. This questionnaire was developed based on objectives contained in the module [28]. Meanwhile, the validity of the module content questionnaire was used to obtain the validity of content of the data module from experts. This questionnaire was constructed based on the views by Russlle [3] who suggested the validity of the questionnaire module should include the following five criteria, i) meet the target population, ii) good implementation of the module iii) the time provided is sufficient; iv) an increase in achievement and v) change of attitude after following the module. The reliability of the module was obtained through questionnaires answered by students and validity of content was obtained through experts who reviewed the contents of Career Exploration Module. The data obtained were analyzed by internal consistency by using Cronbach Alpha.

Two sets of samples were used in this study. Samples in determining the reliability of the module consists of 30 students who are in their fourth semester in Jasin Community College. The sample was selected by purposive sampling method. The number of samples are sufficient in the opinion of Kerlinger [29], where the number of subjects are from a small part of the population that will be studied to test the reliability of the instruments. Meanwhile Fraenkel and Wallen [30] stated that 15 to 30 people is inadequate. Whereas the sample to determine the validity of the modules' content consists of five experts who were selected at random, who have expertise in the field of career counseling and module design. The experts involved were two people from Universiti Kebangsaan Malaysia and Universiti Putra Malaysia as well as two people from the Institute of Teacher Education. This is in line with the views Majid Ponting [6] who stated that the validity of an instrument can be determined through the eyes of experts. The selected experts evaluated each module in terms of content and design modules. Experts were asked to fill out a questionnaire regarding the validity of the module's content after assessing each module.

Content of Career Exploration Module: Career Exploration module that tests the reliability and validity of the content consists of six sub-modules:

Personality and Working Environment Module: This module describes the type of personality and the work environment that suit with the personality traits. The main

activity of this model is Career Interest Test Amla [19] and the means of calculating the score as well as discussions related to the personality of each code is also described in this module.

Exploration Information Module-Dictionary RIASEC: This module contains six volumes of RIASEC Occupational dictionary that explains about different types of jobs along with job descriptions of each of them. The types of work is organized according to six types of personality traits and work environment as proposed by Holland [31].

Job Advertisement Module: In addition, the module also helps students to identify important information contained in a job advertisement.

Resume Writing Module: The main content of this module is the guidance and ways to go about in writing a resume. This module exposes students to resume preparation method according to the correct format. Examples of resumes are also stated in this module.

Job Application Letter Module: This module explains clearly on how to write job application letters. Important components of working application letter are described in details in this module. Examples of job application letters are also included for users reference.

Interview Preparation Module: This module describes effective methods for attending job interviews. Interview procedures such as dress code, personal appearance and needs during the interview are also discussed in this module.

RESULT

Module Reliability: Reliability is associated with the degree of consistency between two measurements of the same thing. Since the data collected in this study are continuous data type that used Likert scale, therefore Alpha Cronbach method was used to measure reliability. Alphacoefficients that approaches the 1.00 figure shows that the items in the scale measure the same thing and this value indicates that these items have high reliability [32].

Hair et.al [33] suggested that the measurement reliability measured by using Cronbach Alpha coefficients, with a scale of measurement that is more than 0.70 and Corected Item-Total Correlation (correlation of

Table 1: Value Coefficient Reliability in Career Exploration Module

Module	Coleration items	Alpha Value
Personality and Working Environment Module	.452- .854	.90
Dictionary of Career Module	.433 - .737	.70
Job Advertisement Module	.433 - .813	.84
Resume Writing Module	.349 - .642	.62
Job Application Module	.601 - .809	.87
Interview Preparation Modul	.782 - .866	.95

Table 2: Evaluation Module Content Validity of Experts on

Expert Percentage	Validity Coefficient
Expert 1 88%	.88
Expert 2 71%	.71
Expert 3 84%	.84
Expert 4 100%	.100
Expert 5 93%	.93

items with a total score corrected) 0:30 or more is considered as an acceptable reliability indicator. While Mohd Majid [6] suggested that the Cronbach alpha level of 0.60 and above, has a high reliability of alpha value. In this pilot study, researchers used the Cronbach Alpha correlation of 0.60 and a corrected item with a score of 0.30 as a reliability indicator is acceptable. The results showed that all the tested modules have high reliability exceeding .60. and the correlation of items with a total score that is corrected is at a very good level. Table 1 shows the reliability of each module.

Personality and Working Environment Module, Dictionary of Career Module, Job Application Letter Module and, Interview Preparation Module).

The Validity of the Content Module: To obtain the validity of content, the modules were referred to specialists who have expertise in the field of career counseling and module design. Each expert module was supplied with a set of Career Exploration Module along with questionnaires. A total of five experts had been appointed to evaluate the validity of the content of the Career Exploration module. The results of the assessment made by experts found that all the assessed modules have a high degree of validity of more than 70 percent or 70 coefficient. Formula for content validity used as follows:

$$\frac{\text{Total score expert (x)}}{\text{Maximum Score (25)}} \times 100\% = \text{content validity achievements}$$

Source : Jamaludin Ahmad [28]

Table 2 below shows the evaluation of the validity of content by a specialist. Based on the table, all available modules achieved a rating of 70 percent or .70. This means that all of these modules achieved a high level of content validity.

Discussions and Study Implications: This study has proven that the Career Exploration Module's reliability and validity have a high content and is ready for use. High reliability is obtained through the process of the pilot study carried out for the usability of the module to the target group, while the validity of the content is obtained through the validation by experts in the field of career counseling. The finding is consistent with a study by Edward and Richard [9] who stated that the minimum value for the reliability was .80. Similarly, studies by Tuckman and Waheed [34] and Abu Bakar Nordin [8] who stated that the level of proficiency or achievement of 70 percent is considered to have achieved or reached a high level.

This finding is also consistent with the findings of previous researchers who also discovered that career modules tested in a pilot study have achieved good Cronbach alpha values 2012; Jazimin *et al.* [14]; Jamaludin *et al.* [2]; Mohammad Aziz Shah [16]; Syed [17]; Hanid 2007). In addition, this finding also coincides with what had been stated by Julie (1995) who stated that the measuring device is considered to be strong and suitable if there are existing evidences regarding the validity and reliability. The findings are also consistent with previous studies by researchers who found that modules with high validity and reliability are effective in helping to improve career preparation process [17, 18, 22-26]. The findings of this study have achieved the objectives of the study that were presented, namely to assess the reliability and validity of the contents of the module.

This study brings implications in terms of practicality and theoretically. From a practical aspect, the study proves that the Traveler Career module have a high validity and reliability. In other words, this module has been certified to fit target groups. Apart from community college students, Career Traveler module can also be used by students of other educational institutions. The next implication showed the results of the study proves that the skills available in the Career Exploration Module such as Personality and Working Environment Module, Dictionary of Career Module, Job Advertisement Module, Resume Writing Module, Job Application Letter Module and, Interview Preparation Module, Personality and career surroundings, career preparation (resume, interviews, job application letter) should be emphasized in programs by career counselors either in schools or in higher educational institutions. The theoretical implications of this study also proves that the module authentication

method through a questionnaire based on the objectives proposed by Russell [3] and modified by Jamaludin [28] is suitable and can be used to indicate the validity and reliability of the module. Experts also found that reference methods are suitable in determining the legality of the contents of a module.

CONCLUSION

This study has successfully tested the reliability and validity of Career Exploration Module. The results showed that the reliability and validity of Career Travel Module content are high. This module can be used to help job seekers prepare for their careers. In addition, this module can also be used in schools or other institutions of higher learning.

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