

Evaluation of the Content Validity Index of a Job Satisfaction Instrument on Performance among Tourism Lecturers in a Malaysian Vocational College

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Abstract

The purpose of this research is to assess the content validity of the Work Satisfaction Towards Job Performance instrument, specifically in the context of vocational lecturers' job performance, utilising the Content Validity Index (CVI). The evaluation involved the perspectives of seven experts, selected based on predefined criteria outlined within this study. The validation process employed two key indices: the Item Content Validity Index (I-CVI) and the Scale Content Validity Index (S-CVI) to assess the content's validity. The study focused on examining five distinct constructs related to job satisfaction, encompassing various aspects such as the work environment, salary, colleagues, workload, and job performance. These constructs were derived from a compilation of 64 items, incorporating insights from the dual-factor theory perspective (Herzberg, 1959) and the Vocational Colleges Malaysia Performance Assessment Form (PBPPP, 2015). The I-CVI values ranged from 0.85 to 1.00, while the S-CVI/AV for each construct attained the following scores: 1.00 for the work environment, salary, and colleagues, 0.97 for workload, and 1.00 for job performance. These results align with established standards, affirming the substantial content validity of the job satisfaction instrument in the context of job performance assessment among vocational lecturers. In conclusion, the findings substantiate the suitability of the job satisfaction instrument as a reliable measurement tool within this research. Further recommendations include conducting comprehensive statistical analyses to ensure the reliability of the developed constructs.

Keywords: Job Satisfaction, Job Performance, Content Validity Index (CVI), Validity of Content Experts

Introduction

In the realm of educational development, Malaysia recognizes the pivotal role that Technical and Vocational Education and Training (TVET) plays in fostering economic growth, job creation, and enhancing employee satisfaction. This strategic shift from traditional vocational high schools to vocational colleges is underscored by curriculum enhancements and the introduction of certification programs, reflecting the nation's commitment to improving the quality and relevance of TVET education. The importance of TVET, serving as a cornerstone for preparing a skilled and competent workforce capable of meeting the demands of the global economy, cannot be overstated. These educational reforms, part of a broader global movement aimed at creating a well-trained workforce (Cong & Wang, 2012), are evident in Malaysia's pivotal position in offering a range of certification programs, including the esteemed Diploma Vocational Malaysia (DVM). These certifications, empowering students with essential skills and qualifications, are integral to Malaysia's vision for economic growth and human capital development. Vocational colleges in Malaysia are instrumental in promoting TVET skills and increasing graduate employability. These initiatives, outlined in the 11th Malaysia Plan, aim to propel the country towards becoming a high-income nation. By investing in TVET and vocational colleges, Malaysia is positioning itself for a more competitive and prosperous future. In this context, vocational college lecturers play a key role in the TVET system, responsible for equipping students with the necessary skills and guidance for their careers. However, job dissatisfaction among these lecturers can arise from heavy workloads, administrative burdens, lack of support, and insufficient mentorship or guidance.

In this context, the researcher is developing and validating an instrument to measure job satisfaction and its relationship to job performance in Malaysian vocational colleges. Adhering to good psychometric criteria is essential in ensuring the instrument's quality, reliability, and validity. Customized measurement tools are necessary for specific contexts, as existing tools like the Job Descriptive Index (1969), the Job Satisfaction Survey (1985), and the Minnesota Satisfaction Questionnaire (MSQ) may not be entirely applicable. The new tools, based on the Two Factor Theory (Herzberg, 1959), will incorporate dimensions like work environment, salary, coworkers, and job performance. The research instrument developed for this study underwent a preliminary content validity assessment prior to the pilot study. Content validity, as emphasized by Polit et al (2006); Rubio et al (2003); Zamanzadeh et al (2015), is the extent to which a survey tool accurately measures the intended construct. Creswell (2013) notes that the content validity of any measurement instrument depends on its alignment with practical examples and the input of domain experts. In this study, the instrument's items were appraised by seven content validity experts, following Lynn's (1986) recommendation of involving six to eight experts for such evaluations.

Measuring and reporting the content validity of the instrument is a crucial objective in this research, especially for a tool assessing job satisfaction within Malaysian vocational colleges. The validity of the study increases the researcher's confidence in the measurement's objectivity, despite the subjective nature of the research (Yaghmaei, 2003; Rubio et al., 2003). The initial stage in establishing the measurement of the items is to ensure the accuracy of the content, validating that the items on the test accurately represent the construct being measured. The developed items then undergo evaluation by seven experts, in line with Lynn's (1986) recommendation.

Literature Review

The dynamics of globalization and competitiveness in the labour market necessitate organizations to have qualified and high-performing employees, which significantly impacts employee productivity (Thakur et al., 2020). In this context, string management, as a central focus in every aspect of labour resource management and implementation, becomes crucial. Vocational lecturers face several challenges in their careers, including national curriculum policy, assessment and evaluation systems, information technology, workload burden, student behaviour, and time constraints (Kamarudin & Taat, 2020). These challenges require vocational lecturers to be deeply committed to improving the quality of the nation's TVET education system. The role and responsibilities of lecturers in vocational colleges, especially in relation to their workload and qualifications, deserve equal attention. A study by Ariff, Mansor, and Yusof (2016) found that vocational lecturers experience higher levels of stress compared to typical daily high school teachers, primarily due to overbearing workloads while earning the same average salary. This situation necessitates a steadfast and diligent spirit in vocational lecturers to maintain teaching performance standards and to address issues of job satisfaction for achieving excellent performance (Luque-Reca et al., 2022).

In Malaysia, several job satisfaction instruments have been translated into Malay for the field of education. However, it's unclear whether the validity of these translated assessments differs, leading to varying interpretations. This ambiguity raises questions about the validity and reliability of each instrument (Abdullah & Ali, 2017; Sahaat & Nasri, 2020). This concern is echoed by Denise et al (2007); Shrotriyia & Dhanda (2019), who identified numerous issues with these instruments, including limited and inadequate analysis, the involvement of only two experts compared to standard practices, a lack of convincing empirical evidence, and insufficient reporting of content validity. Given these issues and problems identified through an initial review and intensive literature study, it is apparent that there are weaknesses in assessing content validity for job satisfaction and performance achievement in the vocational college environment. The job satisfaction skills instrument developed by researchers for Malaysian vocational college lecturers is an adapted instruments from relevant past studies. This instrument has been developed through a more detailed and systematic study. Therefore, the main purpose of this study is to measure the validity of the instrument's content using the Content Validity Index (CVI).

Objectives

The main objective of this research is to thoroughly evaluate the content validity of the instrument designed for the purpose of measuring job satisfaction and job performance among tourism vocational lecturers at vocational colleges in Malaysia. The evaluation will be carried out by systematically examining how well the tool is able to effectively represent the relevant aspects of job satisfaction that impact job performance within this vocational college environment.

Methodology

Figure 1 below shows the framework of the study, a summary of the construction process, and the validity of the content of the instrument of job satisfaction on the achievement of performance in Malaysian vocational colleges.

Study Design

In this research, a quantitative survey was administered to lecturers working at Malaysian Vocational Colleges. The study included a rigorous evaluation process consisting of four stages to assess the content validity of the survey instrument.

- i. Phase 1: Construction of Measurement Constructs in Study
- ii. Phase 2: Selection of Instrument Content Validity Expert Panel
- iii. Phase 3: Implementing Content Validity Assessment
- iv. Phase 4: Improvement of Constructs and Items

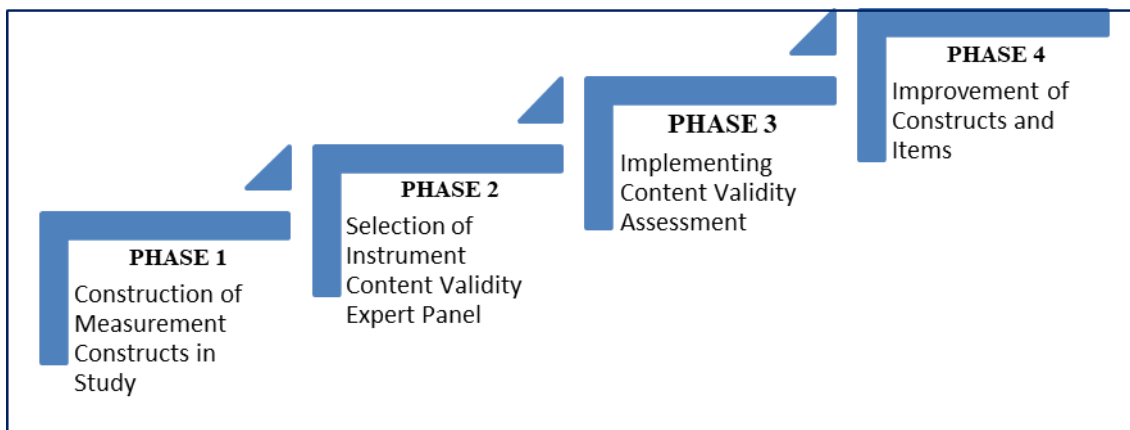


Figure 1. Study Framework for Item Construction, Content Validity and CVI for Study Surveying Tools

Phase 1: Construction of Measurement Constructs in The Study

Previous research studies have yielded a number of theories pertaining to job satisfaction (Fadzin et al., 2020). The Maslow Theory (1954); Herzberg Theory (1968); Smith Theory (1969) are three prominent theories that examine the intrinsic and extrinsic dimensions of job satisfaction as perceived by individuals. The Maslow Theory (1987); Herzberg (1959) are often regarded as the primary and foundational sources within this theoretical framework. The aforementioned studies conducted by Khan et al (2021); Amin et al (2021) examine several models that explain the motivational elements and employee demands that are associated with job satisfaction or dissatisfaction. The theories mentioned earlier hold significant relevance and suitability in addressing the present requirements and circumstances encountered by lecturers in tourism programs, as evidenced by an initial survey. Based on those theories, it is argued that job satisfaction can be attained by fulfilling many levels of needs, encompassing physiological demands, security, love, self-esteem, and self-actualization, as proposed by Maslow in 1954.

The identification of suitable constructs for the study was accomplished through the utilization of study difficulties, relevant literature, theoretical frameworks, and study-related models. The selection of these constructs and items was guided by the study's objectives in order to ensure that the resulting instruments accurately measure the intended variables (Rubio et al., 2003). The selection of constructs was carried out by means of an extensive review of previous research works, coupled with the administration of a preliminary survey to five vocational lecturers affiliated with vocational colleges in Malaysia. Moreover, the instrument underwent modifications derived from analogous disciplines. The factors pertaining to job satisfaction were adapted from a survey conducted by Hassan (2022), which

focused on assessing the work environment as well as compensation and benefits. The development of co-worker instruments involves an element of adaptation and direction from two prominent scholars in the field of job satisfaction, namely Hassan (2022); Luque-Reca (2022), as demonstrated in their study titled "Review of Work Satisfaction Levels in Public Secondary Schools". In relation to the workload component of vocational instructors, the evaluator will make use of the research instruments developed by Arshad and Mustapha (2017); Muttalip et al (2021) to examine the correlation between workload, self-efficacy, and job satisfaction among lecturers at the Vocational College. The instruments utilized in this study were derived from the Performance Achievement Constructs (PAC) framework, with adaptations made from the PBPPP form and previous research conducted by (Arshad and Mustapha, 2017). A construct selection schedule was implemented to identify the primary constructions that hold significance in the present field of study. This approach is consistent with the study's aims to address its research questions and objectives.

Phase 2: Selection of Instrument Content Validity Expert Panel

After constructing the instrument, the selection of experts was based on criteria ensuring their expertise and experience in the field of study. Following Lynn's (1986) recommendation, the researchers engaged seven experts, which falls within the typical range of five to ten experts for such studies. These experts were chosen for their knowledge and experience in the field of tourism and their involvement in Technical and Vocational Education and Training (TVET) institutions. The verification by the face validity experts consisted of two linguists to ensure that the instruments were designed to align with the field of study and use the correct and understandable language structure for respondents. The grammar proficiency specialists have more than 15 years of working experience in the field of languages and have served in both public and private vocational college institutions. Additionally, a panel of content experts reviewed and provided insights on the questionnaire's format, content, and linguistic structure. The criteria for their selection included: i) academic qualifications in tourism management; ii) over ten years of experience in tourism management; iii) current positions in universities, educational institutions, and vocational colleges (both public and private); and iv) a willingness to participate in the evaluation process.

The researcher issued official appointment letters to the selected experts through the university. These letters and the questionnaire instruments were sent electronically via social media applications like WhatsApp and email. The experts were given a one-month period to review the instrument's contents. A summary of the seven selected experts is provided in Table 1 below.

Table 1

List of Panels Experts

| Expert | Field of Expertise | Position | Service Period | Institution/University/ Vocational College |
|----------|------------------------------------|-------------------------------|----------------|---|
| Expert 1 | Event Management and Tourism | Senior Lecturer | 25 | University Utara Malaysia |
| Expert 2 | Tourism Management | Tourism Programme Lecturer | 15 | University Technology Mara A |
| Expert 3 | Hospitality and Tourism Management | Tourism Programme Lecturer | 14 | Polytechnic A |
| Expert 4 | Adventure and Tourism | Tourism Programme Lecturer | 15 | Community College A |
| Expert 5 | Tourism Management | Head of the Tourism Programme | 14 | Vocational College A |
| Expert 6 | Malay Language | Head of Language Department | 25 | Vocational College B |
| Expert 7 | Malay Language | Head of Language Department | 25 | Vocational College C |

Phase 3: Implement a Content Validity Assessment

Validity means measuring what is to be measured (Daud et al., 2017, Mokhtar et.al., 2017; Chua, 2006; Guspatni et.al., 2018) so that the instruments built or adapted are in accordance with the concept of study to be presented (Sekaran et al., 2010; Jasmi 2011; Guspatni et al., 2018; Shafiee, Ghani & Mahamood., 2020). Next, the researcher conducts an expert consent check using the Content Validity Index (CVI) value (Polit & Beck, 2006; Polit et al., 2007) after obtaining confirmation of the content from the selected experts. The Content Validity Index (CVI) is one of the methods that can be used to determine the validity of the overall content of an instrument (Lindell & Brandt, 1999). CVI provides direct information on expert consent by converting ordinal scale data into two categories, for example, relevant or irrelevant (Polit & Beck, 2006). Table 2 below illustrates the appropriateness of the I-CVI values according to the number of experts and references used. The value of the I-CVI obtained must meet the suitability of the expert number according to the validity value of the content that has been set. However, if the I-CVI value does not meet the measured value, then the researcher should reassess the results based on the needs of the study (Aziz et al., 2013).

Table 2

Expert Number and Accepted Score Index Value

| Number of Experts | CVI Index Value | Referral Sources |
|-------------------|-----------------|---|
| 2 | >0.80 | Davis (1992) |
| 3 to 5 | 1 | Polit & Beck (2006), Polit et al., (2007) |
| Less than 6 | >0.83 | Polit & Beck (2006), Polit et al., (2007) |
| 6 to 8 | >0.83 | Lynn (1986) |
| 9 | >0.78 | Lynn (1986) |

Phase 4: Improvement of Constructs and Items

After obtaining the content validity assessment instrument form from the appointed experts, the researcher performs an I-CVI construct analysis on each construct and study item. Each item should reach a value of at least 0.83 as recommended by (Lynn, 1986; Denise et al., 2007). Experts give marks when reviewing items critically and encourage experts to comment in writing on the fields provided to improve the researcher's understanding through reprimanded items. In the content validity form, the reviewer also took into account any comments and suggestions for improvement in terms of sentence arrangement, grammar, sentence usage structure as well as suggestions for improving study items. Based on the feedback of the experts, the process of modification and purification of the questionnaire was carried out which involved the suitability of items, modification of statements, modification of sentence order, correction of technical errors such as spelling and language Sharifah et. al (2017); Guspatni et. al (2018); Kulsum et. al (2021) and modifications on a meaningful measurement scale. Improvements in constructs and items were also carried out to avoid any confusion of sentences and language during the process of answering the questionnaire by the respondent. This is because each item built will take into account the language, spelling and style of writing based on comments obtained from experts.

Findings

In the context of social studies, the Content Validity Index (CVI) is used to measure perception and level of satisfaction among respondents (Baharuddin et al., 2020). CVI provides direct information on expert consent by converting ordinal scale data into two categories, for example, relevant or irrelevant (Polit & Beck 2006). Researchers ensure that the CVI value is equal to 0.78 and above for the instrument to receive (Lynn, 1986). However, in the view of Tilden et al (1990), the value of CVI should exceed 0.7. CVI describes the value of each item measured and measures the scale of each item (S-CVI). The I-CVI value measures expert consent, while the S-CVI/AVE value is the relevant consent value of all experts (Denise F. Polit et al., 2007). The researcher analyzes each item according to the I-CVI value and S-CVI value to obtain the appropriate and accurate constructs and items for the reliability exercise. In this study, two main constructs were identified, namely, the job satisfaction of vocational lecturers and the achievement of performance, consisting of 64 items. According to Yusoff (2019), the formula for measuring validity is

- i. To measure the amount of expert consent is to calculate the sum of all experts who agree on each item.

Example: on the item B2 (Total expert consent is an expert 1+ expert 2 + expert 3 +

- expert 4 + expert 5 + expert 6+ expert 7 = 7)
- ii. Value I-CVI = (The amount of approval of the expert ÷ the number of expert)
Example: Item 2 (B2) (7 ÷ 7 = 1)
- iii. Mean Value I-CVI = Total number on I-CVI ÷ number of items.
Example: (1 + 1 + 1 + 1 +1 +1+1+1+1+1 ÷ 10 = 1.00)
- iv. Value S-CVI = UA Number ÷ Item Count.
Example: (1 + 1 + 1 + 1 +1 +1+1+1+1+1 ÷ 7 = 1.00)
- v. Value S-CVI/AVE = Number of relevant consent rates ÷ Number of Experts.
Example: (1.00 + 1.00 +1.00 +1.00 +1.00 +1.00 +1.00 ÷ 7 = 1.00)

The results of the Content Validity Index (CVI) analysis conducted in accordance with Table 3, Table 4, and Table 5 have found that the index score values for each construct in the questionnaire have shown a very high level of expert approval. The finding of the item content validity index (I-CVI) ranges from 0.85 to 1.0, and the scale content validity index (S-CVI/AV) for each construct is 1.00 for the work environment construct, 1.00 for salary and benefit constructs, 1.00 for colleagues’ constructs, 0.97 for workload constructs, and 1.00 for performance constructs, as agreed by Lynn (1986) and Polit & Beck (2007). The overall findings show that the validity of the content of the work satisfaction instrument on performance is high and can be used as a measuring tool in this study.

Table 3
Overall Finding of Content Validity Index (CVI) for Work Environment

| Item no. | E1 | E2 | E3 | E4 | E5 | E6 | E7 | Experts in Agreement | I-CVI | UA |
|----------------------|------|------|------|------|------|------|------|----------------------|-------|------|
| B1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Proportion Relevance | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | Mean Value I-CVI | 1.00 | |
| | | | | | | | | S-CVI/UA | | 1.00 |
| | | | | | | | | S-CVI/AVE | | 1.00 |

Table 4

Overall Finding of Content Validity Index (CVI) for Salary and Benefits

| Item no. | E1 | E2 | E3 | E4 | E5 | E6 | E7 | Experts in Agreement | I-CVI | UA |
|----------------------|------|------|------|------|------|------|------|----------------------|-------|------|
| B11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Proportion Relevance | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | Mean Value | 1.00 | |
| | | | | | | | | I-CVI | | |
| | | | | | | | | S-CVI/UA | | 1.00 |
| | | | | | | | | S-CVI/AVE | | 1.00 |

Table 5

Overall Findings of Content Validity Index (CVI) for Colleagues

| Item no. | E1 | E2 | E3 | E4 | E5 | E6 | E7 | Experts in Agreement | I-CVI | UA |
|----------------------|------|------|------|------|------|------|------|----------------------|-------|------|
| B21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B22 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B27 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B28 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B29 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B30 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Proportion Relevance | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | Mean Value | 1.00 | |
| | | | | | | | | I-CVI | | |
| | | | | | | | | S-CVI/UA | | 1.00 |
| | | | | | | | | S-CVI/AVE | | 1.00 |

Table 6

Overall Finding of Content Validity Index (CVI) for Workload

| Item no. | E1 | E2 | E3 | E4 | E5 | E6 | E7 | Experts in Agreement | I-CVI | UA |
|----------------------|------|------|------|------|------|------|----|----------------------|-------|------|
| B31 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B32 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 0.85 | 0 |
| B33 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B34 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B35 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B36 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B37 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B38 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B39 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| B40 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 0.85 | 0 |
| Proportion Relevance | 0.80 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | Mean Value I-CVI | 0.97 | |
| | | | | | | | | S-CVI/UA | | 0.80 |
| | | | | | | | | S-CVI/AVE | | 0.97 |

Table 7

Overall Finding of Content Validity Index (CVI) for Job Performance

| Item no. | E1 | E2 | E3 | E4 | E5 | E6 | E7 | Expert in Agreement | I-CVI | UA |
|----------|----|----|----|----|----|----|----|---------------------|-------|----|
| C1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C22 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| C24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |

| | | | | | | | | |
|------------|------|------|------|------|------|------|------------|------|
| Proportion | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | Mean Value | 1.00 |
| Relevance | | | | | | | I-CVI | |
| | | | | | | | S-CVI/UA | 1.00 |
| | | | | | | | S-CVI/AVE | 1.00 |

Note: I-CVI = Item level content validity index. S CVI/UA = Scale-level content validity index, universal agreement calculation method.

Discussions

Table 8 shows a summary of the findings for the validity of the content in the studies. The findings showed that the high validity index value for the job satisfaction instrument on the achievement of the lecturers of the Malaysian Vocational College Tourism Programme. The overall value of the content validity is in line with the values set by Lynn, 1986 and Polit & Beck (2007).

Table 8

Summary of Overall Content Validity Findings

| Construct | Items No | I-CVI (>0.83) | S-CVI/Ave (>=0.90) |
|---------------------|----------|---------------|--------------------|
| Work Environment | 10 | 1.00 | 1.00 |
| Salary and benefits | 10 | 1.00 | 1.00 |
| Colleagues | 10 | 1.00 | 1.00 |
| Workload | 10 | 0.97 | 0.97 |
| Job Performance | 24 | 1.00 | 1.00 |

However, the findings of this study show a high number but there are several items that need to be noted according to Table 9 by the researcher, namely by refining the sentences and structure of the use of items and researching them to meet the objectives of the study. Study items are systematically arranged and achieve a clear meaning in the study. Based on the feedback of the expert panel detailed as in Table 9, the process of modification and purification of the questionnaire was carried out which involved the suitability of items, modification of statements, modification of sentence order, correction of technical errors such as spelling and language and modifications to a meaningful measurement scale. Next, the researchers conducted a pilot study to measure the reliability of this instrument.

Analysis of Expert Feedback

Next, a review of the validity of the experts was conducted by a total of seven expert from those who have experience and are recognized as having expertise in this field of study. All comments and recommendations given by the judging panel are detailed will be further revise. Based on the recommendations of experts, the researchers have taken action by re-improving the instruments that have been made. Table 9 also shows a summary of the distribution of items after receiving reprimands and suggestions for improvement from various aspects of sentence order, language usage, spelling, technical content of items and repetition of items that have been improved. Some instrument improvements are implemented based on the validity of the content by experts, however there are some more validity to be taken into account which is the reliability of the item. To obtain the reliability of the item, then a pilot study should be carried out.

Overall, the panel of experts acknowledged and agreed that all items in this adapted construct are capable of measuring aspects of the content to be measured with little modification to the items. However, some expert views on the contents of the questionnaire have been given attention, among others, as summarized in Table 9.

Table 9

Distribution of Items after Expert Verification

| Construct | Items No. | Item No. Accepted | Item No. Fixed |
|---------------------|------------------|--|-----------------------------------|
| Demographics | 8 | A2, A6 | A1, A3, A5, A7, A8 |
| Work Environment | 10 | B3, B4, B5, B8, B9 | B1, B2, B6, B7, B9, B10 |
| Salary and Benefits | 10 | B11, B12, B13, B15, B16, B18 | B14, B17 |
| Colleagues | 10 | B20, B22, B24, B26, B29, B30 | B21, B23, B25, B27, B28 |
| Workload | 10 | B33, B34, B35, B37, B38, B39 | B31, B32, B36, B40 |
| Job Performance | 24 | C1, C2, C4, C5, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C21, C22 | C3, C6, C7, C19, C20, C23, C24 |
| Total Items | 72 | 42 | 30 |

Study items are systematically arranged and achieve a clear meaning in the study. The total value of the content validity is in line with the values set by (Polit & Beck, 2007; dan Lynn, 1986). Therefore, referring to the I-CVI score, no indication was dropped and all of them were retained in the instrument.

Conclusion

Assessing the accuracy of the content is an important procedure that should be conducted properly in order to gain acceptable and reliable research tools to meet the study's objectives. The item's high validity value ensures that it is easily comprehensible for the respondent, does not contain repetitive elements, utilizes appropriate terminology, achieves its aims, and is relevant prior to conducting a pilot study. Content validity the instrument is an important way to pinpoint problem areas, reduce measurement error, reduce respondent burden, determine whether or not respondents are interpreting questions correctly, and ensure that the order of questions is not influencing the way a respondent answers. Even it is almost impossible to design a perfect instrument; still there are a many of considerations that need to be highlighted to develop a good instrument. Therefore, it can be stated that the content of the working papal instrument assessing the performance of Malaysian vocational college lecturers has been deemed valid, with a value ranging from 0.85 to 1.00 (Lynn, 1986). The panel of assessors has accepted this validity, allowing the study to move on to the next phase. After successfully completing the content validity process, the researcher can proceed with additional research to assess the dependability of the item with the actual respondents. This will ensure that the instrument produced is very reliable and certainly valid. It is suggested that the calculation for I-CVI using this instrument utilise empirical data from expert scores. It

is recommended that future studies use Exploratory Factor Analysis (EFA) to investigate the validity and reliability of the measured instruments.

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