Job Readiness Elements for Hospitality Graduates: A Pilot Study

(Elemen Kesediaan Kerja untuk Graduan Hospitaliti: Kajian Rintis)

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ABSTRACT

Job readiness questionnaire was developed to measure the level and important element for hospitality graduate. A pilot study was conducted in order to determine the reliability and validity of the questionnaire. There are six constructs were identified such as communication, problem solving, ICT, organization and leadership teamwork, workplace attitude, self-management, and technical skills for this questionnaire. A total of 30 lecturers from Kolej Vokasional Setapak were selected to participated in this survey. Rasch Measurement Model (i.e., PTMEA CORR, item fit, item polarity) was used to analyse the responses using Winsteps. This study found that PTMEA CORR has a positive value, in which items are able to differentiate the capabilities of the respondents. Besides, the results of infit and outfit mean square are ranged between 0.60 and 1.4. The quality of items is high because the reliability value is also high. In addition, the separation of item and person is at the acceptable range. However, statistical data shows that 8 out of 122 items have been dropped.

Keywords: Pilot study; validity; reliability; instrument; Rasch Measurement Model; construct; job readiness

ABSTRAK

Soal selidik kesediaan kerja telah dibangunkan untuk mengukur tahap dan elemen penting bagi graduan hospitaliti. Kajian rintis telah dijalankan bagi menentukan kebolehpercayaan dan kesahan soal selidik. Terdapat enam konstruk yang dikenal pasti seperti komunikasi, penyelesaian masalah, ICT, kerja berpasukan organisasi dan kepimpinan, sikap di tempat kerja, pengurusan diri, dan kemahiran teknikal untuk soal selidik ini. Seramai 30 orang pensyarah Kolej Vokasional Setapak telah dipilih untuk menyertai tinjauan ini. Model Pengukuran Rasch (iaitu PTMEA CORR, kesesuaian item, kekutuban item) digunakan untuk menganalisis tindak balas menggunakan Winsteps. Kajian ini mendapati PTMEA CORR mempunyai nilai yang positif, di mana item mampu membezakan keupayaan responden. Selain itu, keputusan infit dan outfit min square adalah antara 0.60 dan 1.4. Kualiti item adalah tinggi kerana nilai kebolehpercayaan juga tinggi. Selain itu, pemisahan item dan orang berada pada julat yang boleh diterima. Walau bagaimanapun, data statistik menunjukkan bahawa 8 daripada 122 item telah digugurkan.

Kata kunci: Kajian rintis; kesahan; kebolehpercayaan; instrumen; Model Pengukuran Rasch; konstruk; kesediaan kerja

INTRODUCTION

Generally, job readiness is based on skills, attitude and knowledge required by company (i.e. employer) that can meet the job description and organization goals. Each readiness criteria are differing from each job or the position. In the context of job readiness skills, it is one of the important elements aimed to prepare graduate/employee with the basic academic, critical thinking and adequate skills needed to maintain employment. The basic academic skills such as reading, writing, basic math and communication skills are essential for improve job performance. In literature, there number of essential job readiness elements or skills were widely discussed, for example, problem, oral communication, adaptability, collaboration, resource management, and organizational skills in various position. However, job readiness of graduate focused on the Kolej Vocational (KV) graduates specially in hospitality is less emphasize. Thus,

this study intended to discover the important job readiness elements that required for them. Therefore, a job readiness research instrument was developed beforehand.

In this paper, pilot study comprised of three purpose, which (i) to determine the reliability and validity of the job readiness of hospitality graduate's research instrument., (ii) to identify the point measure correlation in the construct of the job readiness elements which are in the acceptable range, (iii) to identify the separation index of the job readiness elements and (iv) to identify the fit items in the construction of the items job readiness elements within the acceptable range. The rest of this paper is organized as Section II is Literature review, Section III is Methodology, Section IV is Finding and discussion, and Section V is Conclusion.

LITERATURE REVIEW

PILOT STUDY

The word 'pilot studies' refers to mini versions of a full-scale analysis as well as pre-testing basic resources such as a questionnaire or interview schedule (Van Teijlingen & Hundley 2002). In some cases, pilot study is also known as feasibility study. However, in Eldridge *et al.,* (2016) stated that there are differences among both feasibility study and pilot study in term of definition and process. Table 1 shows the difference of both feasibility study and pilot study.

TABLE 1. Feasibility Study and Pilot Study

Criteria	Feasibility Study	Pilot Study
Definition (Eldridge *et al.*, 2016).	A feasibility study asks if something can be done and if so, how should we proceed with it.	A pilot study asks the same question but has a particular design feature: a future study, or part of a future study, is carried out on a smaller scale in a pilot study.

The process of pilot study is crucial element of a good research design and can be essential in term of process, resources, and management (Thabane et al. 2010). For example, in the context of the process, the pilot study is able to assess the time and resources problems that may arise during the main study (e.g., how long the main study will take to complete; whether the use of some equipment will be feasible or whether the form(s) of assessment selected for the main study are as good as possible) (Van Teijlingen & Hundley 2001).

Conducting a pilot study does not ensure success in the main study but increases the likelihood of success. Pilot studies have several important functions and can provide valuable insights for other researchers. There is a need for more discussion among researchers on the process and outcomes of the pilot studies. Besides, Hassan, (2006) stated that pilot study is necessary and useful in providing the groundwork in a research project. Besides, by conducting pilot study some of the logistic issues that can arise during main study can be detected. For instance, pilot study is able to ensure the instruction given to the respondent is easy to understand, expected information needed and assess whether the level of intervention is appropriate.

JOB READINESS STUDY

There are number of some examples of the pilot study in related to the job readiness, students' skill and development. For example, research Ramisetty and Desai (2017) was conducted the pilot study on employability skills and job readiness perception of post-graduate management students. A total of 60 students were selected by using cross-sectional design with non –probability sampling techniques. The Cronbach alpha, $0.7 - 0.8$ was obtained from five main scales tested (i.e., communication skill, personal and professional advancement, adaptation skills and flexibility, intellectual and technical skills, and understand organization's vision and development)

Besides, Jais, Naidu, Nor Asshidin, and Yusof, (2018) conducted a pilot study on the shared services readiness questionnaire in higher learning institution. The finding revealed that organizational readiness and employee engagement are positively related to the employee job satisfaction in shared service implementation. Furthermore, the perception of Lifelong Learning (LLL) program participants on their willingness to venture into entrepreneurship has been investigated (Ghazalan, *et al.*, 2018). Aspects of the level of readiness measured in this study include the motivation, knowledge of skills and interests of the LLL program participants. The research sample consists of 235 respondents from participants in the LLL program. The instrument used was a questionnaire with a coefficient of reliability of $\alpha=0.9$, indicating a very high reliability to the instrument

Furthermore, Tuttle and Bialocerkowski (2017) mentioned a pilot study was conducted to evaluate a feedback training module containing online learning and live simulation. A convenience sample of all 68 students was recruited for the study during the first two years of a master's degree in Physiotherapy in Australia. All students rated the module as having a large impact on their feedback abilities. Erwin, Fedewa, and Ahn, (2012) have piloting study on the Effect of physical activity classroom intervention on student academic performance outcomes. Participants in the intervention (n=15) received daily physical activity breaks. Fluency reading and mathematics, physical activity, grades, and standardized test scores were collected. Intervention effects were examined using mixed-design ANOVA. Students from the intervention had significantly higher reading fluency and post-intervention mathematics scores and higher means for standardized reading and mathematics scores as well as grades. Short physical activity abouts are important to improve CBM mathematics and to read fluency scores. Classroom teachers should be encouraged to devote

time during academic learning to incorporate physical activity.

METHODOLOGY

SAMPLE AND DATA COLLECTION

The job readiness of hospitality graduate questionnaire consists of 122 self-assessment items that represent 8 main elements of student's job readiness as presented in Table 2. Respondents were asked to select their agreement to the items using the five-point Likert scale (i.e., 1 – strongly disagree, to 5= strongly agree. This study is quantitative research approach which involves empirical data using questionnaire. A total of 30 lecturers from Kolej Vokasional ERT, Setapak, Kuala Lumpur were randomlyselected as respondents. The questionnaire was physically distributed using face- to face approach among the lecturers in hospitality department. Respondents were given 10-15 minutes to complete the questionnaire after briefing.

TABLE 2. Construct and No. of Items

No.	Construct	No. of Item
1	Communication	15
2	Problem Solving	16
3	ICT	10
4	Organization and Leadership	12
5	Teamwork	12
6	Workplace Attitude	27
7	Self-Management	23
8	Technical Skills	7
	Total	I22

DATA ANALYSIS

In this study, data was collected based on the lecturer scores on the items in the developed job readiness questionnaire. The scoring is a Likert scale as stated in the previous section. Data pre-processing was conducted manually before analyzing. Winsteps software was used to analyze each item in the questionnaire. A construct validity was analyze based on the Rasch measurement model presented in Table 3.

TABLE 3. Summary of Item Validity and Reliability Using Rasch Model

Criteria	Statistical Info	Results
Item Validity	Item Polarity	PTMEA CORR > 0
Item	Item Fit	Total mean square infit and Outfit of 0.6-14
Item Misfit	Separation (SE)	All items shows ≥ 2.0 [11]
	Person Reliability	Value > 0.8
	Item Reliability	Value > 0.8

FINDING AND DISCUSSIONS

RELIABILITY AND ISOLATION INDEX

Table 4 presented the acceptable reliability threshold, Alpha Cronbach (α) that proposed by Bond, Fox, and Lacey (2007)

TABLE 4. Interpretation of Cronbach Alpha Score

Alpha-Cronbach Score	Reliability
0.9-1.0	Very good and effective level of consistency
0.7-0.8	Good and acceptable
0.6-0.7	Acceptable
< 0.6	Item need to be repaired
<0.5	Item need to be dropped

Table 5 presented results from the analysis of the pilot study, the reliability of which refer to the Alpha (α) is 0.98. According to Bond, Fox, and Lacey (2007), mean value of instruments used in a very good and efficient manner with a high degree of consistency and can be used for actual research. The results of the pilot study also showed the reliability of the respondent (person reliability) is 0.96 in which the reliability can be accepted. The index value of isolation (separation index) obtained also showed high results of 5.04, which to Linacre (2005), good isolation index value is greater than the value of 2.0. Analysis on the reliability of the item (item reliability) registered 0.72 points. This shows the good and acceptable reliability.

TABLE 5. Reliability and Separation

Criteria	Person	Item
Measured	N = 30	N = 122
Reliability	0.96	0.72
Separation	5.04	1.59
Person raw score –to – measure correlation	0.95	-0.98
Cronbach Alpha (KR – 20)	0.98	-

ITEM POLARITY

In this study, the point measure correlation (PTMEA CORR) value for this questionnaire indicated positive values. The PTMEA CORR analysis was conducted with the aim of testing the extent to which the construction construct achieves its goals and the relationship between the items built up with the respondents.

ITEM FIT

In this research a total of six item were rejected as it is not reached the acceptable requirement of the item fit. The suitability of item, the MNSQ outfit index must be in acceptable range, 0.6-1.4. The results of this pilot study

analysis found that there are six items that are not in the. These items are item OP 50, KM03, PM26, BK54, SK76, BK58.

Standardized measurement of residual correlation value is to determine whether there are items that overlap. High residual correlation for the two items showed the item is not independent, either because the item has the same characteristics among each other or for both combining several other dimensions that are shared. According to Linacre (2007), if the correlation value for the two items above 0.7 shows a high correlation value and only one item has to be kept while the other items have to be dropped. Analysis of this research revealed that 10 pairs of overlapping items were established based on the correlation. Table 6 shows the items which were dropped

TABLE 6. Largest Standardized Residual Correlation

Pair	Correlation	Item	Item	Result (Dropped)
1	0.90	PD98	PD99	PD98
2	0.87	K13	PD98	PD98
3	0.86	SK77	PD98	PD98
4	0.84	SK85	SK87	SK85
5	0.83	KM12	KM14	KM12
6	0.83	KM12	KM13	KM12
7	0.82	BK63	PD106	PD106
8	0.80	SK84	SK86	SK84
9	0.79	TM39	TM40	TM40
10	0.78	SK85	SK86	SK86

IMPLICATIONS OF FINDINGS

In this study, the high reliability was obtained by using Rasch measurement model. This finding presented the reliability of tested questionnaire was valid and reliable to determine the dimensions of the job readiness.

CONCLUSION

In this study, pilot study was conducted to determine the questionnaire is feasible and provide better findings. A pilot study is one of the essential stages in job readiness research. A Rasch measurement model was used to analyze the feasibility of job readiness item. Rasch's analysis aims to maximize the construct's homogeneity and to allow greater redundancy reduction. The fit statistics indicate provide a decision in deciding whether to either delete, rescore, or reword an item. In conclusion, the item analysis is the best way of controlling the quality of the measuring tools applied.

Individual separation index is good across all the constructs and the item separation index is excellent. Overall items moving toward the constructs were found. The next step in the study will be to improve the items in this instrument.

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