ORIGINAL ARTICLE

Content Validity and Feasibility of Worksite Assessment for Return-to-Work Program among Injured Workers

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ABSTRAK

Penilaian tempat kerja bertujuan untuk menganalisis keperluan pekerjaan dan keupayaan seseorang bagi melaksanakan tugasan serta mengenalpasti potensi tugasan yang lain. Pertubuhan Keselamatan Sosial (PERKESO) telah membangunkan penilaian tempat kerja untuk program Kembali Bekerja bagi menilai individu berinsuran yang dirujuk oleh pengurus kes PERKESO. Kajian berkaitan kesahan penilaian tempat kerja perlu ditambahbaik yang merangkumi semua aspek dari segi fizikal, psikologikal, persekitaran dan ergonomik. Kajian ini bertujuan untuk menentukan kesahan kandungan dan kebolehlaksanaan Penilaian Tempat Kerja bagi Program Kembali Bekerja. Kajian keratan rentas ini melibatkan 16 subjek melalui persampelan bertujuan; 10 pengurus kes dari pelbagai pejabat PERKESO daerah untuk kesahan kandungan dan muka, diikuti dengan fasa kualitatif yang melibatkan kajian kebolehlaksanaan ke atas enam individu berinsuran melalui perbincangan kumpulan focus dan temu bual telefon. Penilaian ini menunjukan kesahan kandungan yang bagus untuk setiap item (I-CVI ≥ 0.78) dengan nilai 'modified' Kappa yang sangat bagus (K > 0.74) dan kesahan muka yang bagus (FVI ≥ 0.83). Kajian kebolehlaksanaan menunjukkan bahawa penilaian ini boleh dilaksanakan dan merupakan alat yang berkesan untuk digunakan sebagai penilaian awal dalam Program Kembali Bekerja. Instrumen ini dipercayai memberi keyakinan kepada penilai dan dalam menilai keupayaan klien untuk kembali bekerja. Ia dapat meningkatkan tahap keberkesanan perbincangan antara pengurus kes dan ahli terapi pekerjaan dalam merancang pelan intervensi yang sesuai. Walau bagaimanapun, kajian lanjut perlu dijalankan untuk mengkaji kesahan konstruk dan kesahihan instrumen ini.

Kata kunci: Analisa pekerjaan; kembali bekerja; penilaian tempat kerja

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ABSTRACT

Worksite assessment analyses the demands of a worker's job task and the skill required to perform the duties. Pertubuhan Keselamatan Sosial (PERKESO) has developed its edition of the worksite assessment for the Return To Work program scheme to evaluate referred insured persons by the PERKESO Case Manager. There were limited studies regarding the validity of worksite assessment that include physical, psychological, environmental and ergonomics aspects. This study aimed to determine the content validity and feasibility of the Worksite Assessment for the Return-to-Work Program. This cross-sectional study involved 16 subjects through purpose sampling: ten Case Managers from various regional PERKESO offices for content and face validity, followed by a qualitative phase on feasibility testing on six insured persons through focus group discussion and telephone interview. This assessment showed good content validity for each item (I-CVI ≥ 0.78) with excellent modified Kappa value (K>0.74) and good face validity (FVI ≥ 0.83). The feasibility study shows that this assessment is a feasible and efficient tool for initial assessment in the Returnto-Work Program. The instrument is a promising tool that can facilitate effective discussions with occupational therapists in planning a suitable intervention plan. However, further investigations are needed to explore this instrument's construct validity and reliability.

Keywords: Job analysis; return to work; worksite assessment

INTRODUCTION

The American Occupational Therapy Association defines work as pursuing, acquiring and performing employment, retirement adjustment, volunteer exploration and participation. is an activity that requires work skills and physical ability behaviour (Jacobs et al. 1992; Lecours & Therriault 2018). Returning to work after illness or injury requires a structured program to ensure that a person can retrieve their previous job or pursue another potential job. The program is usually managed by an occupational therapist with comprehensive work rehabilitation; however, in some institutions, the program will be handled by a Case Manager with a mix of backgrounds, such as occupational therapy, physiotherapy and others. The primary goal of occupational therapy in work rehabilitation is to promote the client's highest degree of functional status in all occupation contexts, including physical, emotional, social, cognitive and communication dimensions (Bratun & Zurc 2022; Rice & Luster 2002). It is important to determine the factors that hinder work performance, then promote further plans to improve the employees' performance to achieve the job demands. This assessment includes an employee's functional ability, job demand analysis and work environment (Söderback 2009; Tengland 2011). Worksite assessment is a thorough assessment of the person's ability to confirm the exact nature of the worker's duties and establish the other possible duties available at the workplace. The assessment will be used

during worksite visits, and the results will be analysed based on observation by the assessors. Furthermore, worksite assessment is an evaluation form to determine an employee's work-related physical, psychological and cognitive demands, environment and ergonomic requirements (Jang et al. 1997; Schweitzer et al. 2018). According to Bakker and Demerouti (2007), job demands relate the physical, psychological and organisational components that involve continuous physical and psychological (cognitive and emotional) effort or abilities and are therefore connected with particular physiological costs.

Pertubuhan Keselamatan Sosial (PERKESO) is a statutory body that protects social security for employees and their dependents based on joint responsibility through pooling resources, sharing risk and income replacement (Perkeso 2020). The three core principles of PERKESO are solidarity fund, income replacement and equality. Solidarity funds can help employees who become disabled or suffer from invalidity and pension to dependents in the case of death. Other than that, the replacement of income ensures that employees with disabilities or invalidities are not financially affected based on the number of contributions paid based on employees' salaries (Awang et al. 2016). In fulfilling the concept of social justice, employers and employees registered under PERKESO need to be included in the scope of coverage. The benefit is to ensure fairness and equality for all employees contributing to the solidarity fund (Perkeso 2020). PERKESO provides protection consisting of employment schemes injury schemes, invalidity schemes, and employment injury insurance schemes, including foreign workers (Abdullah et al. 2022). One of the validity scheme benefits in PERKESO is the Return to Work Disability Management Program, which is managed and coordinated by the Case Manager. The Case Manager will assess the referred insured worker using the Worksite Assessment form to gather the information and analyse job demand and environmental conditions.

recognised PERKESO is its sustainable management program that helps insured persons to RTW through work rehabilitation. In assessing the person, PERKESO created its worksite assessment consisting of three domains: (i) Physical demands and Sensory functions; Cognitive and Psychosocial demands; and (iii) Environmental Influence, Protective Equipment & Office Ergonomics. This assessment form includes the activity descriptions, which are the frequency and characteristics of the work tasks (Perkeso 2020). For insured persons referred to the Return to Work (RTW) program, the Case Manager will use the Worksite Assessment to assess their problems for plans (Olivier et al. 2012). According to the RTW model in PERKESO, the process involved was a referral, assessment, rehabilitation plan, natural support, fading and follow-up evaluation (Perkeso 2020). Worksite assessment provides input in pursuing a work rehabilitation plan. Hence, vocational rehabilitation uses worksite assessment for job modification (Hammond 2008; Prior et al. 2017). This research aimed to validate and study the feasibility of the Worksite Assessment.

MATERIALS AND METHODS

This study aimed to validate the content

for Worksite Assessment by the users who were the Case Managers from different locations with experience in assessing insured persons and helping them to RTW. The panel must review and provide opinions on the content and face of the assessment. This study was followed by the feasibility phase carried out among the subjects, who were insured persons, through discussion.

Study Design

The mixed-method study was approved by the Research Ethics Committee Universiti Kebangsaan Malaysia with the reference number UKM PPI/111/8/JEP-2023-213 and approved by PERKESO for the data collection with the reference number PERKESO.600 5/1/10(44). This study consists of two phases i.e. (i) validating the content and face of the Worksite Assessment and (ii) feasibility study of the assessment with cognitive interviewing.

(i) Phase I

In the first phase, content validity and face validity questions were formulated based on questions recommended by Yusoff (2019). The assessments were distributed to ten senior Case Managers through email. The inclusion criteria of the expert panels include senior Case Managers from PERKESO with at least five years of working experience in the RTW program. These ten expert panels were recruited by purposive sampling.

(ii) Phase II

The second phase is a feasibility study using qualitative method. Online focus

group discussion was conducted about 2 hours on three insured persons followed by interviews with another three insured persons for 30 minute each subject. By employing two data acquisition methods, the researchers could delve more deeply into particular issues (O'reilly et al. 2021). Study participants recruited by purposive sampling were included as follows: (i) Malaysian citizens; (ii) insured workers who referred to the RTW program with a minimum of one year working experience; (iii) able to understand English; (iv) having physical problems, fracture, amputation, herniated disc and soft tissue injury. However, respondents with psychiatric conditions, cognitive dysfunction and respondents with speech and hearing problems were excluded from the study. Before starting the focus group discussion, an information sheet and consent form were given one day earlier to the insured persons. As for interviews, the informed consent and demographic data information were converted into Google Forms and distributed through WhatsApp messenger to the insured persons.

Instruments

PERKESO had already permitted the Worksite Assessment form to be used in this study as collaborative research with PERKESO. This assessment collected patient demographics, three domains of work-related components, and a summary for the result section. A total of 67 components were divided into domains: (i) physical demands and sensory functions, for example working position or posture, manual handling and sensory visual or auditory; (ii) cognitive and psychosocial demands,

for example attention, memory, listening skill and verbal communication; and (iii) environmental influence and protective equipment and office ergonomics, for example temperature, humidity, machine movement, seating and desk arrangement, computer device and working space. The raters must rate the frequency of the task demand using the Never, Often, Frequent, and Common (NOFC) scale and state the characteristics of the activity description based on the job demand. Furthermore, the "ability demonstrated" column was rated according to the Likert scale, in which 1 indicated "unable", 2 indicated "limited", 3 showed "lightly limited," and 4 indicated "normal". The forms of limitation were also described in checkbox for either "physical", "cognitive", "duration/ time", "pain/sensory", "equipment" or "environment" (Perkeso 2020). At the end of assessment, summary of all the component involved in work task either can be demonstrated consistently and able to adapt to environment consistently. List of checkbox included for short term plan, long term plan and status to predict RTW either duration for monitoring or successful RTW. This assessment was carried out by Case Manager by observing client demonstrating, then analysing and documenting to record results.

This assessment form was used as a reference for content, face validity, and feasibility study. For the feasibility study, a few questions were developed and asked according to the RE-AIM Framework proposed by Holtrop et al. (2018). According to Holtrop et al. (2018), reach (R) corresponded to the characteristics of individuals receiving the intervention; effectiveness (E) consisted of the results of the intervention; adoption (A)

depicted the uptake in the environment or organisation; implementation (I) evaluated how the intervention was implemented; maintenance (M) examined the degree to which the intervention was implemented throughout time. However, the M, which meant the framework's maintenance, was irrelevant to the short-term feasibility study (Jensen et al. 2021).

Depression Anxiety Stress Scale 21

Depression Anxiety Stress-21 (Dass-21) is a 21-item self-report questionnaire designed to measure the core symptoms of depression, anxiety, and stress was administered in 10 to 15 minutes (Parkitny & Mcauley 2010). This screening conduct by researcher on subject insured person during Phase II before conduct focus group discussion and interview. This instrument was used to determine the exclusion criteria regarding psychological state, to ensure the subject in good mental state to respond during feasibility study. Bahasa Malaysia Dass-21 has very good Cronbach's alpha values of 0.08, 0.74 and 0.79 for depression, anxiety and stress, respectively (Musa & Maskat 2020; Ramli et al. 2012).

Montreal Cognitive Assessment

The Montreal Cognitive Assessment (MoCA) consisted of 30-point cognitive tests and was administered in 10 minutes. A score of 26 or above was considered normal cognition (Hobson 2015). This assessment was conduct by researcher to subject insured person during feasibility in order to determine the exclusion criteria regarding cognitive difficulties. A score of 26 or above was considered

normal cognition and met the criteria as inclusion. MoCA obtained significantly superior sensitivity, specificity, positive and negative predictive values, and classification accuracy (Freitas et al. 2013). MoCa Bahasa Malaysia showed good internal consistency with Cronbach's alpha of 0.80 (Razali et al. 2014)

Statistical Analysis

In this study, descriptive statistics were conducted to analyse participants' background information using IBM SPSS version 26 (George & Mallery 2016). Content and face validity for Phase I were examined using Microsoft Excel, content validity of the assessment was determined by calculating the Content Validity Index (CVI) and Kappa value of each item for relevance and clarity in this study (Abdollahpour et al. 2010; Zamanzadeh et al. 2015). The Face Validity Index (FVI) was calculated to determine the face validity of the assessment (Yusoff 2019). For Phase II, focus group discussions and interviews were captured and transcribed Transcription verbatim. from language English and Bahasa Malaysia from recording, paraphrasing and extract to Nvivo software. A deductive analysis was performed and guided by the RE-AIM framework as we sought to determine relevant topics for testing feasibility (Holtrop et al. 2018). Adhering to the goal of evaluating feasibility was ensured by the deductive technique, which embraced the exploratory element of qualitative research while keeping an open mind to unexpected outcomes.

After reading and rereading the transcripts, we identified pertinent

raw data text segments. These units represented either a single concept or data item and then were independently coded according to the author's interpretation. Based on the RE-AIM framework, we then identified themes within the units. Each theme was then subjected to a meaning condensation, providing themes of results. We assessed our findings using member checking to enhance the trustworthiness (Curtin & Fossey 2007; Topping et al. 2021). The analysis was performed using NVivo 14.

RESULT

Participants' Demographic Data

There were two groups of participants involved in this study. The first group was expert panels (N=10), whereby PERKESO Case Managers were recruited for content and face validity. Table 1 showed the demographic data of expert panels with a mean age of 31.00 \pm 3.77 years old. The mean working experience of this sample was 5.50 + 1.58 years. Furthermore, most were female (70%) and worked at Pejabat Perkeso from east and west Malaysia. The second group consisted of PERKESO insured persons (N=6) enrolled in the feasibility study. Table 2 showed the demographic data for Insured Persons. This study involved three male and three female-insured persons with different work backgrounds. The participants also had diverse educational levels and diagnoses that can understand instruction during feasibility phase, which they need to demonstrate according to the assessor instruction.

TABLE 1: Demographic data of expert panels

Variable	Categories	Frequencies (N%)	Mean ± Standard deviation
Age			31.00 ± 3.77
Working Experience			5.50 <u>+</u> 1.58
Gender	Male Female	3(30%) 7(70%)	
Workplace	Perkeso Office Putrajaya Perkeso Office Teluk Intan Perkeso Office Miri Perkeso Office Sarawak	3(30%) 4(40%) 1(10%) 2(20%)	

TABLE 2: Demographic data of insured person

Id.	Age	Gender	Educational level	Work	Diagnosis
IP1.	20	Male	SPM	Kitchen Crew	Traumatic Amputation Of Right Thumb DIPJ, Index, Middle Ring & Little Fingers At Level Of PIP
IP2.	29	Female	Degree	Manager of SOCSO	Closed displaced fracture middle 1/3 right clavicle, L2 chance fracture with no neurological deficit and multiple abrasion wounds over the left forehead, left cheek, and bilateral lower limbs.
IP3.	52	Male	Diploma	Accountant	Bilateral below knees amputation
IP4.	32	Female	Degree	Teacher	Open Comminuted Fracture Right Tibia
IP5.	27	Male	Diploma	Technician	Left Shoulder STI (Slap Tear)
IP6.	33	Female	Degree	Programmer	Herniated Disc with bilateral trigger finger

Content Validity

The content validity was analysed using the CVI and the results were demonstrated in Table 3. In this analysis, ten expert panels evaluated the relevance and clarity.

Overall, items in the instrument were acceptable for content appropriateness with content validity (I-CVI \geq 0.78). The kappa value calculated to assess interreliability for the classification was found to be in good agreement (K > 0.74).

Face Validity

Face validity was assessed using the FVI from ten experts' opinions. As shown in Table 4, the value of FVI for each domain achieved excellent face validity as the value of (I-FVI 0.83). The Scale-Level Face Validity Index (S-FVI/Ave) for the entire assessment was calculated by averaging Item FVI scores across all items. The Scale S-FVI/Ave was found to be 0.99 (S-FVI/Ave 0.90). Meanwhile, the assessment's Scale-Level Face Validity Index (S-FVI/UA) was calculated using an unweighted

TABLE 3: Content validity

I-CVI Classification	No. of Items		Score
	Relevance	Clarity	_
>0.79	79	79	Appropriate
0.70 - 0.79	0	0	Need Revision
<0.79	0	0	Eliminated
Modified Kappa Classification			
>0.74	79	79	Excellent
0.60 - 0.74	0	0	Good
0.40 - 0.59	0	0	Fair

TABLE 4: Face validity

Domains	S-FVI / Ave	S-FVI/ UA
Demographic Data	0.98	0.8
Physical Demands & Sensory Functions	0.98	0.8
Cognitive & Psychosocial Demands	0.98	0.8
Environmental Influences, Protective Equipment & Office Ergonomics	1.0	1.0
Overall	0.99	0.85

average of the Item Face Validity Index (IFVI) scores across all items. The S-FVI/ UA had shown an acceptable cut-off value point for all domains with 0.85, indicating a high level of concern among experts regarding the face validity of the entire scale, with each item contributing equally to the assessment.

Feasibility Study

All insured persons were only given the Worksite Assessment a few days before the focus group discussions and interviews. The results were summarised in Table 5 and presented by themes in the following results sections using the RE-AIM dimension with suggestion for improvement.

(i) Reach

Based on Holtrop et al. (2018), reach

included the factors that contributed to the participation of the desired initiative. The feasibility involved an insured person with one year of working experience. This study population reflected the demographic of insured workers referred to RTW who underwent assessment using Worksite Assessment. The participants were aged 20 to 52, with 50% male personnel. The sampling was purposive and considered participants' willingness to cooperate while the excluded others might not meet the inclusion criteria. The inclusion criteria were decided to achieve a deliberate and thoughtful decision from the capable participant, in which five out of six participants had at least a diploma in education.

The workplace evaluation provided the Case Managers with sufficient clarity to evaluate the insured person based on the data on the form. In order to utilise the assessment, Case Managers must possess

Theme	Summary of the result	Improvement/Suggestion
Reach	 Easy to be applied as an assessment for insured persons. Worksite Assessment is suitable for insured persons across conditions. 	
Effectiveness	 All the components included in the Worksite Assessment are comprehensive and holistic. Worksite Assessment is good enough to identify problems among insured persons 	
Adoption	 Insured persons perceived Worksite Assessment well. The insured person is not familiar with the assessment. Therefore, fewer suggestions or ideas for improvement. 	- Is a formative assessment that require demonstration base on instruction from assessor
Implementation	 Worksite Assessment can be used as an initial assessment for the return-to-work program. The usefulness of Worksite Assessment can vary in situations. 	
Implications for practice	 Insured Persons include new suggestions on how the assessment can be implemented for them. 	- Distinct instruction and demonstration by assessor

TABLE 5: Overview of results in final themes for feasibility

a certain level of basic knowledge.

"...considering Case Managers have basic knowledge about OT, PT and others, I think it easy for them to fill in the form." (IP2, 29, Female, Degree)

Furthermore, most insured persons stated that the assessment form was suitable and appropriate for workers. However, most perceived the assessment as ideal for people with physical limitations that hinder their work productivity.

"for example, like myself, if my back hurts, my hands hurt, I really can focus on doing activities for my work efficiently, and if my hands hurt when I sit incorrectly, it will affect my productivity when I want to work. So I find this assessment is also perfect for every employee."

(IP6, 33, Female, Degree)

This assessment has been widely used among PERKESO Case Managers in the country for insured persons referred to the RTW program PERKESO. The Case Manager suggested using enrichment training to understand the terminology in the assessment efficiently.

(ii) Effectiveness

The insured persons indicated that the worksite assessment was detailed and included every area required for RTW planning. All of the components involved three main domains and components consisted of physical, sensory and cognitive: social, environmental influence, protective equipment and office ergonomics. This showed that all Worksite Assessment components were comprehensive and holistic in identifying the problems insured persons face in the

workplace.

"Overall, this assessment is excellent because it is comprehensive, detailed, and focuses on many aspects. This form also assesses our working hours and what difficulty we have that involves physical and emotional issues."

(IP6, 33, Female, Degree)

"...think it is enough because all aspects have been covered in this, and I think it is comprehensive enough because all aspects are there."

(IP5, 27, Male, Diploma)

From the point of view of insured persons, the assessment aligned with what was required to address the customers' problem and enable them to resume employment.

"I think the form is good enough for me because it fits with what we need to fix to start working again"

(IP1, 20, Male, SPM)

(iii) Adoption

Before implementing the assessment, we needed to know how well participants can understand and take up the information included in the assessment form and to obtain the perspective of different groups regarding the assessment concept (Holtrop et al. 2018; Jensen et al. 2021). This study was conducted at the PERKESO office with an insured person who contributed to PERKESO. The study concluded that all Case Managers can conduct the assessment. Hence, all insured persons perceived the Worksite Assessment well, indicating that even non-experts can

readily grasp the content of the assessment form because everyone was aware of its goals and the information it required.

"This assessment form is to assess worksite where it includes many things. Based on my understanding, we can know whether we can do the work from this form."

(IP4, 32, Female Degree)

However, there was feedback from insured persons who claimed that the assessment content was unfamiliar and unsure of what needed to be improved.

"So far, I am unsure because I am an insured person. So, I think maybe this is appropriate because someone as a Case Manager has to look at what we do and evaluate, so I do not know, I am not sure."

(IP5, 27, Male, Diploma)

There was potential to prove the assessment was feasible for other institutions to use while conducting the RTW program by presenting the paper and assessment in conference meetings and opening them as public domain documents. Introducing the assessment might help other assessors assessed the worksite by adopting the assessment.

(iv) Implementation

Worksite Assessment was developed as a crucial assessment for the RTW program. The information obtained from insured persons through focus group discussions and phone interviews indicated that they all agreed that the assessment form was suitable for an initial assessment in the RTW program. This study's respondents proved that the assessment had been

implemented to gain sufficient information for those who wanted to RTW.

"Yes, this form is sufficient as an initial assessment for an insured person for return to work."

(IP2, 29, Female, Degree)

"This form is suitable for people who want to return to work. And it looked at many aspects."

(IP6, 33, Female, Degree)

Furthermore, the Worksite Assessment can be helpful in various cases and conditions of insured persons. Case Managers must be trained and well-versed to gather sufficient detailed and comprehensive information from insured workers.

"I cannot say it can be used to all, but I think it will be sufficient for my condition. The condition I face as an insured person new to return to work. The information needed from this assessment form. I think it is sufficient."

(IP2, 29, Female, Degree)

(v) Maintenance: Implications for practice

The assessment form needed to be detailed regarding the evaluator's instructions and the client's understanding to ensure that the assessment can be sustained over time. A suggestion given by the insured person regarding the execution of the Worksite Assessment was that clear instructions be provided so that the client can demonstrate adequately how to find the issues regarding the ability to do work.

"...think that to give better understanding to the client, the person who wants to assess should explain it so that the client will understand and be clearer when they want to explain their problem. Examples and demonstration of what kind of action is wanted when assessing."

(IP6, 33, Female, Degree)

This study suggested a further study conducted by panel experts from Occupational Therapy to validate the assessment and review the future version of this assessment. This recommendation was viable for all Case Managers to employ, but it will prohibit any component from being excluded.

DISCUSSION

The degree to which an instrument assesses the crucial components of the ideas that its designers or users claim it measures is known as content validity (Patrick et al. 2011). The validity of content and face are crucial to developing any form of measurement (Connell et al. 2018). Worksite Assessment consists of components from job demand analysis and workability (Söderback 2009; Tengland 2011). Further evaluation by therapists is needed in the process of clients returning to work using a more detailed assessment, which is Functional Capacity Evaluation (FCE). FCE systematically measures a person's ability to perform work activities safely. Fore et al. (2015) have stated that the assessment can be used to identify current limitations and levels of disability, and it is helpful for RTW planning. Therefore, it complements Worksite Assessment as an initial assessment for the RTW program. This study aims to validate

and study the feasibility of Worksite Assessment developed by **PERKESO** themselves. From the study, we can conclude that all the items in Worksite Assessment have high relevance and clarity to the purpose of the assessment form itself. All 79 items were retained after content and face validity analysis. Ten panel experts have been recruited to facilitate the content validation process. However, this study does not include the modifications and improvement of the instrument after the validation process for a better determination and quantification of content validity (Dalawi et al. 2023; Lynn 1986). As the number of panels increases, the probability of agreement diminishes, leading to convergence of the I-CVI and Kappa values (Polit et al. 2007: Zamanzadeh et al. 2015). After controlling items by calculating the modified Kappa statistic, each item with (I-CVI ≥ 0.78) would be considered excellent (Polit et al. 2007: Zamanzadeh et al. 2015). Whereas the evaluation criteria for (K > 0.74) is considered excellent (Cicchetti & Heavens Ir 1981; Vermeulen et al. 2019). Thus, the results have shown that all the items in the Worksite Assessment demonstrated acceptable content validity.

The comprehensive item includes tasks or actions that both blue-collar workers and office workers would experience. Other than physical components, the second domain is cognitive and psychosocial demands. It also has high I-CVI and kappa values, as they are essential elements in work performance that were not included in previous studies (Weekley et al. 2019). Therefore, it is safe to assume that the content validity for this assessment is acceptable and valid to use. Furthermore, the value of face validity is affected by

the usage of vocabulary and grammar in sentences, clarity of components, sufficient and direct instructions, the structure of instruments and relevance of components to the purpose of the instrument. All five domains include in the Worksite Assessment achieve a high level of face validity with S-FVI/Ave and S-FVI/ UA exceeding the acceptable cut-off point for FVI (FVI ≥ 0.83) for ten panels (Dalawi et al. 2023; Mohamad Marzuki et al. 2018). The S-FVI/Ave and S-FVI/UA meet the satisfactory level; thus, the worksite assessment scale has achieved acceptable face validity.

Only a few previous studies related to work assessment instruments used FVI to measure the FVI. However, the result is consistent with the previous study that conducted a face validity for a new instrument using FVI that showed a good response process (Dalawi et al. 2023). Even though content and face validity are crucial for newly developed assessments, other validation processes are also needed to support the validation.

RE-AIM Framework has been used as a themes for the qualitative data in the feasibility study. Online focus group discussions and phone interviews were conducted separately for each three participants. These mixed qualitative methods helped to obtain information and go through deeper issues (O'reilly et al. 2021). The questions that were asked also came with verbal probing guided by Willis and Artino (2013). This led to diverse viewpoints on the Worksite Assessment from six distinct angles.

Based on the thematic analysis, we came out with five themes guided by Holtrop et al. (2018). The first theme of the analysis is reached, which covers the

factors that contributed to the assessment's use. In other words, Worksite Assessment succeeded in its goal of being a simple tool for Case Managers and evaluators to use when assessing insured individuals' suitability for RTW.

The assessment is also suitable for all insured persons across conditions. According to Markkanen et al. (2021), the tool designed to evaluate workers' safety and ergonomics is simple to use, but it requires more time to observe.

study also includes implications for future practice: the client must demonstrate the work tasks and at the same time observation is needed to obtain the information. The feasibility took 15 to 30 minute to conduct to each subject. However, we did not consider that duration as predict time to conduct with client. Although this study and the previous study did not use the same assessment, however, the component used in the instrument mentioned by Markkanen et al. (2021) study was included in Worksite Assessment. As a result, this study provides a fresh perspective on the value of a comprehensive examination.

Furthermore, it can be concluded that all the components in Worksite Assessment are comprehensive and holistic. This is because the assessment is adequate to identify problems among insured persons. Moreover, this study concludes that Worksite Assessment can be used as an initial assessment for the RTW program. It is proved that the assessment is relevant, holistic and comprehensive, which can vary across different situations.

Strengths and Limitations

Since this study is one of the few that

focuses on work rehabilitation assessment in Malaysia, the findings can serve as a reference for face and content validity in the Malaysian context. In addition, this study contains details on the technical aspects of a Malaysian workplace assessment for future research.

The sample size used in this study is ideal (n = 10) for face and content validation. On the other hand, this study shows flaws regarding the expert panels as they all work under PERKESO organisations. This may lead to the risk of bias among experts. Hence, conducting a feasibility study among insured persons with different backgrounds may affect the results of the technicalities and a theoretical assessment.

Recommendations

In future studies, we recommend that the panel selection is better for experts, for example occupational therapists who specialise in RTW rehabilitation programs be used for the content and face validation.

CONCLUSION

This study aims to find the validity and feasibility of the assessment used by the PERKESO Case Manager. The Worksite Assessment is a useful tool for assessing clients for RTW that gathers information on task demand that then further can be analysed and plan for work rehabilitation intervention. The assessment's validity was found to be satisfactory, and its feasibility assessment received favourable comments. This study emphasises the importance of a comprehensive assessment towards to quality of the rehabilitation program.

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CONFLICT OF INTEREST

The authors have no conflict of interest related to this article.

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