ORIGINAL ARTICLE

An Initial Study of Current Malaysian Occupational Therapy Off-road Driving Assessments

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ABSTRAK

Penilaian pra-pemanduan merangkumi pelbagai jenis ujian. Walau bagaimanapun, di Malaysia, ketersediaan alat piawai masih berkurangan. Sesetengah alat penilaian pemanduan piawai adalah mahal dan kandungannya kurang sesuai untuk tetapan Malaysia. Oleh itu, kajian ini bertujuan untuk membangunkan penilaian pra-pemanduan yang piawai, sensitif kepada budaya tempatan, berpatutan dan komprehensif untuk ahli terapi cara kerja di Malaysia. Reka bentuk kajian ini ialah kaedah penjelasan berurutan. Draf awal Penilaian Pra-Pemanduan Terapi Cara Kerja Malaysia (M-POTA) telah dibangunkan berdasarkan kajian literatur dan disahkan oleh sepuluh panel pakar. Draf awal telah diperhalusi menggunakan perbincangan kumpulan berfokus bersama sepuluh panel pakar. Data yang direkodkan telah ditranskripsikan secara verbatim dan dianalisis menggunakan analisis tematik dan prosedur semakan ahli untuk memperhalusi item, struktur dan pemarkahan M-POTA. Draf kedua M-POTA kemudiannya melalui proses pengesahan kandungan dan muka oleh enam panel pakar. Versi M-POTA 1.0 dihasilkan daripada proses ini. Versi M-POTA 1.0 didapati mempunyai kandungan yang baik dan kesahan muka, S-CVI/Ave = 0.998; S-CVI/UA = 0.986; kappa diubah suai = 0.81 hingga 1.000). Versi M-POTA 1.0 yang disahkan adalah penilaian pra-pemanduan yang piawai, sensitif budaya tempatan dan kos efektif yang diharapkan

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dapat menambah baik amalan rehabilitasi pemanduan semasa Malaysia.

Kata kunci: Malaysia; memandu; penilaian; rehabilitasi; terapi cara kerja

ABSTRACT

An off-road driving assessment includes a variety of tests. However, in Malaysia, the availability of standardised tools is still lacking. Some standardised driving assessment tools are costly, and the contents are less suitable for Malaysian settings. Therefore, this study aimed to develop a standardised, sensitive to local culture, affordable, and comprehensive pre-driving assessment for occupational therapists in Malaysia. The research design for this study was an explanatory sequential design. The initial draft of the Malaysia Pre-driving Occupational Therapy Assessment (M-POTA) was developed based on the literature review and validated by the ten experts. The initial draft was refined using a focus group discussion of ten expert panels. The recorded data were transcribed verbatim and analysed using thematic analysis and member-checking procedures to refine the items, structures, and scoring of the M-POTA. The second draft of M-POTA then went through the content and face validation process by the six expert panels. The M-POTA 1.0 version was produced from this process. The M-POTA 1.0 version was found to have good content and face validity, S-CVI/Ave= 0.998; S-CVI/UA= 0.986; modified kappa= 0.81 to 1.000). The validated M-POTA 1.0 version is a standardised, local culture-sensitive, and cost-effective off-road driving assessment that is hoped to improve Malaysia's current driving rehabilitation practice.

Keywords: Assessment; driving; Malaysia; occupational therapy; rehabilitation

INTRODUCTION

Outcomes from the assessment of driving skills should not be limited based on the suitability of medical factors but the skills and abilities related to driving safely (Unsworth et al. 2019). The driver's sensory, motor, and cognitive skills require a detailed assessment to determine the likelihood of any impairment affecting the suitability for driving (Unsworth et al. 2019). Pre-driving assessment is a tool used to assess suitability for driving performed by occupational therapists (OTs) (Unsworth et al. 2019). Essentially, pre-driving assessments are performed at occupational therapy clinics to assess the visual, cognitive and physical abilities required for safe driving. The second approach involves using driving simulation tools and assessing actual driving on the road (Unsworth et al. 2012). A person's knowledge and skills may change over time with age and environmental, affecting driving performance (Yuen et al. 2012). Driving assessments can help

to maximise driving skills and improve the performance of people with disabilities while driving (Mallon & Wood 2004). However, Unsworth et al. (2012) stated that a lack of consistency in conducting driving assessments influenced different assessment results due to various clinical experiences factors.

OTs need to have relevant knowledge and skills in driving rehabilitation and assess suitability for driving with specific superior standards in the driving assessment process (Slater 2014). The main task of the general OTs is to identify appropriate assessment tools that can be used during the driving assessment (Dickerson 2014). The second task is to determine the suitability of the client to drive (fit or not fit to drive). In the third task, the general OTs assist in collecting client data and share the assessment results with the specialist OTs to reduce the specialist OTs' assessment time when conducting a comprehensive driving assessment. However, until now, no study has been conducted on the role of general or specialist OTs in driving rehabilitation in Malaysia (Lau et al. 2022). Additionally, most of the OTs today still lack of a comprehensive framework setting, confidence and language to apply clinical knowledge and skills to clients, whether at-risk or potentially driving (Golisz 2014).

In Malaysia, OTs generally only conduct pre-driving assessments to check suitability for driving. However, there is insufficient local research evidence and a lack of specialised training in Malaysia's driving rehabilitation and pre-driving

assessment field (Lau et al. 2022). In contrast, OTs conducting the driving assessment in Western countries are called driving rehabilitation specialists (D.R.S.) (Dickerson 2013). In the United States, only a few OTs have the expertise, specialised equipment or license to conduct assessments on the road (behind the wheel) and are referred to as D.R.S. (Dickerson 2013; Jones et al. 2016). In Canada, OTs are specially trained at designated driving rehabilitation centers to conduct specific skills assessments in pre-driving and on the road, commonly referred to as comprehensive driving assessments (Cammarata et al. 2017).

The use of reliable and valid measurement tools is just as crucial in driving assessment as in other areas of OTs's training (Korner-Bitensky et al. 1998). Validated and standardised driving assessments based on the local context to assess an individual's ability in pre-driving can help OTs in Malaysia to refer to accurate and consistent sources of information. This also enables OTs to work with other professional bodies, such as licensing officers from the Road Transport Department, driving schools, driving instructors, vehicle modification agencies and other multidisciplinary groups in evaluating client performance outcomes and achieving their driving goals. However, Lau et al. (2022) reported that in Malaysia, some barriers to implement the driving program are difficulty gaining support within the organisation, struggle to gain funding to buy proper equipment and limited staffing issues to sustain driving rehabilitation programs.

Until now, no single assessment or screening tool can be used for driving fitness screening (Korner-Bitensky et al. 2006). A step-by-step assessment process requires a combination of assessment data and agreement from an experienced driving assessment team to decide the driving suitability (Lundqvist et al. 2011). In addition, some studies state that driving performance should be evaluated based on the results of pre-driving evaluation and evaluation on the road (Unsworth et al. 2012). For stroke clients, prediction and fitness to drive require some combination of standardised and non-standardised assessment tools (Barco et al. 2014), which shows that OTs use various assessment tools to decide on fitness to drive. It is essential for OTs in Malaysia to develop a pre-driving assessment guideline that contains all types of driving assessments with high sensitivity. Consequently, it will shorten the evaluation period by referring to comprehensive and detailed evaluation guidelines without having to conduct other unrelated evaluations. Standardised assessments are essential to help in improving the quality and quantity of information in making accurate decisions (Masuri et al. 2015). Therefore, this study aimed to develop a standardised, sensitive to local culture, affordable, and comprehensive pre-driving assessment for use by OTs in Malaysia.

MATERIALS AND METHODS

Study Design and Location

An explanatory sequential design was conducted to develop a standardised, sensitive to local culture, affordable, and comprehensive pre-driving assessment for OTs in Malaysia.

Sample

A total of ten panels of homogeneous experts with more than five years of experience in driving rehabilitation in Malaysia were recruited to conduct content and face validity assessments for the initial draft of M-POTA (Gibson et al. 2000). The ten expert panels comprised an occupational therapy researcher, five OTs, a rehabilitation physician, an optometrist, an audiologist and a road safety officer from the licensing authority. Each subject selected as a respondent of the expert panel has specific characteristics or fulfils the inclusive criteria that had been written below.

To exemplify, OTs who had never undertaken driving rehabilitation were unsuitable for inclusion in this study. Additionally, the inclusive criteria for the rehabilitation medicine doctor to participate in the focus group discussion (FGD) should have more than five years of experience in driving rehabilitation. Moreover, rehabilitation medicine doctors who did not have clinical practice in driving rehabilitation were excluded from this study. Optometrist should have experience of at least five years in optometry. Optometrist who had never performed an eyesight test for disabled people in Malaysia were excluded from this study. Audiologist should have at least five years' experience in audiology in Malaysia for disabled

people. An audiology panel that had never worked in the clinical field of driving rehabilitation in Malaysia was excluded from this study. The inclusive criteria for road safety officer from the licensing authority must be active in the road safety department, Ministry of Transport Malaysia. Road safety officer from the licensing authority with under five years of experience in a disabled road driving test were excluded from this study.

Then, a total of six expert panels whom OTs experienced in driving rehabilitation were selected based on the criteria proposed by Zamanzadeh et al. (2015) and Davis (1992) which were three panels consisting of OTs with more than five years of experience (professional experts) while the other three expert panels had less than five years of experience in driving rehabilitation (lay experts) to conduct content and face validation. The inclusion criteria for the six OTs experts in this study were those currently serving in the public sector or University, had experience in driving rehabilitation and had special qualifications or special procedures in credentialing or privileging from the Ministry of Health Malaysia that were admitted in driving rehabilitation. OTs who had never carried out driving rehabilitation were excluded from this study.

Instrument

The M-POTA was a newly developed assessment tool referred to the Medical Examination Standards For Vocational Driver's Licensing (Occupational Health Unit 2011), reference to the Occupational Therapy Pre-Driving Assessment Form in Malaysia in the Standard Operating Procedures Book (POS) which is Occupational Therapy for Stroke Patients (Bahagian Sains Kesihatan Bersekutu 2013) and Occupational Therapy For Patients With Hand and Upper Limb Injuries (Bahagian Sains Kesihatan Bersekutu 2013), most of the items and components were included in the first draft of the M-POTA. In addition, previous studies had been referenced to obtain the latest research evidence on standardised and non-standardised assessments with high validity and can predict driving suitability. Keywords such as "off-road driving assessment", "off-road assessment", "driver assessment", "driving assessment", off-road evaluation" and "pre-driver assessment" had been used to search for literature review sources. 11 literature studies were selected to be used as a reference to develop and generate items in the M-POTA. Moreover, the Model of Human Occupation (MOHO) theory was selected as the basic theory to produce a comprehensive M-POTA draft because it looked at the individual, their meaningful activities or occupations, and their relationship with their environment. OTs can be viewed in the domain of MOHO theory: volition, habituation, and performance of the client and help them on driving rehabilitation. The draft of M-POTA consisted of 7 sections, including Medical Information, Pattern of Driving, Communications and Interaction Skills, Motivation for Driving, Process Skills, Environment,

and Recommendation, totalling 96 items.

The content validity and face validity evaluation form of the M-POTA was used as a research instrument to collect expert assessment scores on each item's content validity and face validity in the draft M-POTA. The content validity assessment included the relevance, clarity, and conciseness scoring for each item in the draft M-POTA and used an ordinal scale of 4 scores. Scores for the relevant aspects were; 1 = irrelevant, 2 = items needed to be reviewed, 3 = relevant but required some modification, and 4 = highly relevant. Scores for clarity were: 1 = unclear, 2 = item needed modification, 3 = clear but needed little modification, and 4 = very clear. The ordinal scales for brevity were: 1 = not concise, 2 = item needs modification, 3 = concise but requires little modification and 4 = very concise.

According to Kitzinger (2005), a FGD requires a team of skilled moderators and assistants because facilitators must manage discussion sessions and strengthen participant relationships by creating a comfortable environment. The role of the moderator was also crucial and was one of the research instruments (Krueger & Casey 2002). This was because the moderator needed to prepare the questions to be discussed, help collect data to observe non-verbal interactions, and document the general content of the discussion during the FGD (Breen 2006).

Procedure

The initial draft of M-POTA containing 96 items, content validity and face validity evaluation forms regarding the M-POTA were sent to the ten expert panels. They must fill in the forms within two weeks of receiving the email. After that, an item-level content validity index (I-CVI) and modified Kappa analysis were conducted based on the ten expert panels' scores in the forms. Then, a FGD was conducted online to explore and validate the contents of the M-POTA (Rodrigues et al. 2017). The content of M-POTA was discussed again at the FGD to gain mutual agreement and identify items that needed to be dropped, added, or improved. After the FGD, data were collected using video recordings and note-taking to conduct data analysis. The data from the FGD were analysed directly based on the thematic analysis. Then, the improvement of the second draft of M-POTA was implemented regarding the thematic analysis. The data verification form was sent back to ten expert panels via email to validate the second draft of M-POTA. This was also a data verification process using member-checking techniques. Later, the second draft of M-POTA underwent validation with another six expert panels, which were serving and still conducting pre-driving assessments to provide constructive views on the contents of the second draft of M-POTA. Upon completing the validation process on the second draft of M-POTA, the researchers calculated the I-CVI score, modified Kappa value, and written feedback from six expert panels to produce M-POTA version 1.0.

Data Collection

Ethical aspects were given priority throughout the FGD held as it involved the confidentiality of the identity of the expert panel, the content discussed, and the technique of recording the entire session online. Thus, the information confidentiality form, participant information form, consent form, and the M-POTA evaluation form were provided to the expert panels via email and WhatsApp group and sent out a month before the FGD was held. The expert panels' consent was given before they were invited to the FGD. Besides, during FGD, all experts explained the rules, including queues waiting for opinions and comments on content.

Data Analysis

Qualitative data were collected verbatim. The data were coded according to categories by theme formed with relevant ideas and suggestions using thematic analysis from the findings in the FGD. The analysis stops when reaching saturation, where all questions were explored in detail, and no new concepts or themes emerge afterwards (LeCompte & Schensul 2010). Member checking was done by sending the confirmation form and the second draft of the M-POTA to the ten expert panels to check the accuracy of the content and items as agreed during the FGD session. Then, the draft M-POTA was modified according to the recommendations of ten expert panels in the FGD for verification

and produced M-POTA version 1.0. After that, the statistical analyses were performed using IBM SPSS Statistics (SPSS) version 26 for Windows. The data was conducted by measuring the content validity of the draft M-POTA through the content validity index (CVI) and modified Kappa. According to Zamanzadeh et al. (2015), the I-CVI of ≥ 0.78 and S-CVI/AVE ≥ 0.90 indicated an acceptable level of content validity. For the modified kappa values, 0.40 to 0.59 was fair, 0.60 to 0.74 was good, and values above 0.74 was excellent (Devriendt 2012). Validity analysis for the second draft of M-POTA was conducted based on I-CVI scores, modified kappa values, and face validity proposal data.

RESULTS

Sociodemographic Characteristics

The first content and face validation for the first draft of M-POTA was conducted with ten expert panels who were then attended the FGD. Besides, to be an authentic instrument, the second draft of the M-POTA had undergone content validation and face validation by six expert panel evaluators experienced in driving rehabilitation. Therefore, the profiles of all expert panels covering information on gender, level of education, and working experience in driving rehabilitation were shown in Table 1. Each expert panel was given a different code and a number to represent their identity.

TABLE 1: Profile of the M-POTA draft validation evaluator panel

Expert Panel	Age	Gender	Level of Education	Profession	Working Experience (Years)
Profile of Evaluator Panel in First Draft Validation					
R1	47	F	Master's Degree	Rehabilitation Specialist	7
R2	56	M	PhD	Occupational Therapy Researcher	2
R3	57	F	Master's Degree	Occupational Therapist	15
R4	35	M	Diploma	Occupational Therapist	12
R5	37	F	Master's Degree	Occupational Therapist	9
R6	37	F	Master's Degree	Occupational Therapist	11
R7	49	F	Bachelor's Degree	Occupational Therapist	6
R8	34	M	Bachelor's Degree	Optometrist	6
R9	35	M	Bachelor's Degree	Audiologist	5
R10	35	F	Bachelor's Degree	Licensing Officer	6
Profile of Evaluator Panel in Second Draft Validation					
A		F	Master's Degree		8
S		F	Bachelor's Degree		7
M		M	Master's Degree		6
SU		F	Master's Degree		3
T		F	Master's Degree		2
R		M	Bachelor's Degree		1

Note: PhD = *Doctor of Philosophy
Noted: Diploma level covered basic diploma and advance diploma

Content Validity and Face Validity of First Draft M-POTA

The M-POTA draft containing seven sections (Medical Information, Pattern of Driving, Communications and Interaction Skills, Motivation for Driving, Process Skills, Environment, and Recommendation) and 96 items were distributed to ten expert panels to conduct content and face validation by filling in the evaluation form before attending the FGD. All 96 items in the questionnaire form were calculated to obtain the I-CVI score and the modified kappa value. A total of 45 of the 96 instrument items were dropped because the I-CVI value of the score was lower than 0.70. Of the 51 items not dropped, 36 were suitable and 15 were modified according to the expert panel's recommendations. After re-editing the draft of M-POTA, mean I-CVI or S-CVI/AVE showed satisfactory results with S-CVI/AVE scores being 0.867 (relevant), 0.867 (clarity), 0.879 (simplicity) (Charlton et al. 2004). The mean result of modified Kappa had also shown good agreement among ten expert panels because the value of each item mean score of modified Kappa exceeded 0.70, i.e., 0.72 (relevant), 0.72 (clarity) and 0.77 (simplicity). Table 2 below showed the

TABLE 2: Content validity and face validity of M-POTA

Content Validity	Index (Relevance)	Index (Clarity)	Index (Conciseness)
Content Validity and Face Validity of M-POTA First Draft			
S-CVI/AVE / I–CVI	0.867 (0.71-1.00)	0.867 (0.71-1.00)	0.879 (0.71-1.00)
S-CVI/UA	0.358	0.358	0.373
Mean Proportion based on 5-10 Experts	0.830	0.830	0.900
Min weighted *kappa* values	0.721 (0.17-1.00)	0.721 (0.17-1.00)	0.770 (0.17-1.00)
Content Validity and Face Validity of M-POTA Second Draft			
S-CVI/Ave	0.998 (0.83-1)	0.998 (0.83-1)	0.998 (0.83-1)
S-CVI/UA	0.986	0.986	0.986
Mean Proportion based on 6 Experts	1.000	0.996	0.996
Min weighted *kappa* values	0.997 (0.81-1)	0.997 (0.81-1)	0. 997 (0.81-1)

analysis findings of I-CVI and modified kappa values obtained from the ten expert panels for the draft M-POTA. Besides, after the feedback from the expert panels, in terms of relevance, clarity, and conciseness, redundant words were dropped, and unclear words were altered. Finally, the first draft of M-POTA was produced with seven sections containing 51 items.

Result of FGD

The FGD recordings were verbatim transcribed, and data were explored through thematic analysis. Four main themes were obtained from the transcript analysis after the FGD session, namely (i) M-POTA components, (ii) M-POTA item, (iii) M-POTA structure and (iv) M-POTA grammar with eleven sub-themes that had been set according to the section in the line. Overall, the study impacted the development of M-POTA guidelines. The details of this theme and sub-theme were explained in Table 3.

The first draft of M-POTA, consisting of 7 sections of 51 items, was refined with components, items, structure, and grammar based on the discussion findings after FGD. Then, the second draft of M-POTA had produced besed on the thematic analysis from the FGD, consisting of 8 sections and 72 items.

Content Validity and Face Validity of Second Draft M-POTA

All 72 items in the second draft of

TABLE 3: Themes and sub-themes based on FGD

No	Theme	Sub Theme
1	M-POTA components	
2	M-POTA item	Client's biodata section Medical information Driving context Driving patterns Driving motivation Communication & interaction skills Cognitive & perceptual assessment Vision function Sensory & perception Process skills Recommendation
3	M-POTA structure	
4	M-POTA grammar	

M-POTA were analysed to obtain I-CVI scores, modified *kappa* values, content validity values for S-CVI/ AVE, S-CVI/ UA, expert proportions, and mean values *kappa* score. The second draft of M-POTA had achieved high content validity with a mean I-CVI or S-CVI/ AVE score on relevance, clarity, and conciseness was similar to achieving a score of 0.998, which had exceeded 0.90 (Waltz et al. 2010). Meanwhile, the second draft of M-POTA for relevance, clarity, and conciseness also achieved an I-CVI score exceeding 0.78 (Lynn 1986; Polit et al. 2007) and a score of 1.00 for each item, except one item, which got a score of 0.83. Table 2 showed that the mean value of the *kappa* score for the second draft of M-POTA which was 0.997 for relevance, clarity, and conciseness.

Apart from the content validity data, M-POTA second draft found modifications of items, components, structures, and additions of items based on the written feedback of the six expert panels and the I-CVI score and the modified Kappa value. Thus, the second draft of M-POTA, consisting of 7 sections (Medical Information, Pattern of Driving, Communications and Interaction Skills, Motivation for Driving, Process Skills, Environment, and Recommendation) and 72 items after validation. Then, it was changed to M-POTA version 1.0, and one section: Result / Assessment outcome, was added containing 79 items. Besides, the sections, components, and sub-components of M-POTA version 1.0 were shown in Table 4.

DISCUSSION

In the M-POTA development process, two content and face validations were conducted on the draft M-POTA to determine relevant items and drop non-essential items. Modifications are needed for new instruments. Content validity is essential for researchers to realise if the instruments used for the study are appropriate for the construct, population studied, and socio-cultural background in which the study was conducted (Zamanzadeh et al. 2015). This opinion is supported by previous studies that an instrument has high validity if it measures what it is supposed to measure (Othman & Kassim 2018). The purpose of conducting a second validation with the selection of different expert panels is because the researchers believe that these six expert panels, who are experienced OTs and were still undergoing driving rehabilitation, can provide constructive recommendations based on their experience, knowledge, and clinical practice while conducting the pre-driving assessments. Furthermore, the purpose of conducting content and face validity assessment times on the M-POTA draft was to identify the extent to which the item was appropriately constructed and reflected a particular section and was measured using quantitative techniques (Saw & Ng 2001). In addition, previous studies have also clarified that content validity can provide information about the meaning and clarity of items by helping to improve instruments to achieve recommendations from expert panels (Polit et al. 2007).

TABLE 4: Sections, Components, and Sub-components of M-POTA version 1.0

Section	Component	Sub-component	No. of Item
1	Medical Information	1.1: Primary Diagnosis 1.2: Others Medical Problem 1.3: Medical Prognosis 1.4: Medication & Side Effects 1.5: Red Flags	5
2	Driving Context	2.1: Current Living Context 2.2: Type of Transmission 2.3: Type of Vehicle 2.4: Vehicle Model 2.5: Vehicle Ownership 2.6: License Status	6
3	Driving Pattern	3.1: Driving Experiences 3.2: Crash/ Accident 3.3: Driving Routine 3.4: Driving Habit 3.5: Driving Goals	5
4	Motivation for driving	4.1: I want to drive. 4.2: I am confident to drive. 4.3: Driving is important to me.	3
5	Process Skills	5.1: Vision function [5] 5.2: Hearing and communication skills [2] 5.3: Emotional States [3] 5.4: Cognitive & Perceptual Assessment [17] 5.5: Activity Daily Living & Instrumental Daily Living [2] 5.6: Driving Knowledge [2] 5.7: Sensation & Perception [5] 5.8: Motor Skills [8] 5.9: Summary Of The Overall Function [5]	49
6	Vehicle Handling	6.1: Car 6.2: Motorcycle	2
7	Result / Assessment Outcome	7.1: Competent to drive as per recommendation without modification 7.2: Competent to drive as recommendation with modification 7.3: Incompetent to drive 7.4: Require training from driving school 7.5: Proceed to on-road assessment 7.6: Required driving rehabilitation 7.7: Refer to multidisciplinary team for further	7
8	Recommendation	8.1: Car 8.2: Motorcycle	2
		Total item	79

The development and validation process performed for the second draft and the second draft of M-POTA refers to the instrument development compliance criteria. The most widely used approach for content validity is the content validity index count (Lynn 1986). Validity in qualitative research is interpreted as an accurate observed picture to represent the phenomena studied (Othman & Kassim 2018). Therefore, this study used the content validity form and face validity form notes to analyse the face validity opinions of 16 expert panels. According to Davis (1992), as much as 80% agreement or higher among evaluators is essential for a new instrument. Whereas note-taking, video, and audio recording with Zoom link to record the study results of the FGD is evidence of high reliability (Piaw 2011).

After the research team considered the recommendations and opinions by a second-time validation with six-panel evaluators, the second draft of M-POTA was modified and produced M-POTA version 1.0. M-POTA version 1.0 contained 79 items with eight sections, including initial medical information interviews, 42 standardised assessments, and 44 non-standardised assessments. The content validity and face validity of the second draft of M-POTA have resulted in M-POTA version 1.0, which showed good validity. This was because the recommendations and opinions of the expert panel from the face validity data were beneficial for modifying the M-POTA items and format. This opinion was in line with Zamanzadeh

et al. (2015), who explained that instrument content validity could be determined using the point of view of an expert panel. Qualitative data were collected in interviews with respondents to understand and help enrich and develop identified concepts, considered an invaluable resource for producing items in the instrument (Zamanzadeh et al. 2015).

The study was planned as a face-to-face FGD so that participants could discuss more effectively. However, the study method had to be switched to the online FGD platform because of the Covid-19 pandemic. This left the FGD vulnerable to technical problems such as weak internet signals or disconnection during the FGD and failure to retrieve non-verbal data such as body movements, emotions, and feelings of FGD participants. In addition, the M-POTA developed in this study can still not have an overall evaluation score because there was no scoring system to determine suitability for driving. This study only conducted one FGD covering multiple professions; perhaps this FGD could be conducted according to the profession. Thus, the FGD participants with similar backgrounds and professions were able to provide a more holistic view. In addition, this M-POTA was still in prototype status. Therefore, it remained open to improvement in subsequent studies.

CONCLUSION

M-POTA version 1.0 had good content validity and face validity. M-POTA underwent two times of content

validation through analysis of I-CVI and modified Kappa. Besides, the recommendations and opinions of the expert panel from the face validity data were constructive for modifying the M-POTA items and format. Qualitative data were collected in interviews with respondents to understand and help enrich and develop identified concepts, was considered an invaluable resource for producing items in the instrument (Zamanzadeh et al., 2015). Therefore, M-POTA version 1.0 had good construct validity and face validity.

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