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The Comparison of the Everyday Problems Test (EPT) and the Malaysian Everyday Problems Test (MEPT) among Healthy Older Adults

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Abstract

Aging is a process that is inevitable in any organism. The effect of aging can involve the decline of cognitive function which can be normal or abnormal. A good assessment or instrument is necessary to aid practitioners in screening or detecting any kind of cognitive decline, especially in daily problem-solving and decision-making abilities. Objectives: The current study aims to test: (1) the internal consistency and reliability of the original 28-item Everyday Problems Test (EPT) and the Malaysian Everyday Problems Test (MEPT) version of 14 items; (2) the relationship between everyday problem-solving and demographic factors; and (3) the demographic differences in the various domains of everyday problem-solving. Methods: The sample included 291 healthy and community-dwelling Malaysian older adults within the Klang Valley vicinity, with a mean age of 66.3 years. Variables included demographic factors of age, gender, and education, the Everyday Problem Test (EPT), and the Malaysian Everyday Problems Test (MEPT). Results: Both the EPT and MEPT showed good internal consistency and reliability values. It was also discovered that certain domains of the EPT and MEPT are more influenced by demographic factors, especially educational level, compared to others.

Conclusion: The MEPT is proven to be as acceptable as the original EPT. It can be used to measure older adults' cognitive performance, particularly in solving everyday problems among a Malaysian sample.

Keywords: Everyday Problems Test, Older Adults, Malaysian, Cognitive Performance, Problem Solving.

Introduction

Cognitive decline and cognitive impairment are assumed to be synonymous with aging. The traditional view on aging is that cognitive functions will decline as we age. Particularly, the working memory that is responsible for performing complex tasks such as learning, problem-

solving, and reasoning (APA). This type of memory, the executive function, is affected most as we age. Executive function (EF) is responsible for controlling other cognitive components. For instance, EF is important to control cognitive resources for the use of problem-solving and future planning (Harvey, 2019). Past studies have shown that risk aversion, temporal discounting, and utility maximization are markedly different in older adults (OA) and are often perceived as inconsistent and irrational by others (James et al., 2015; Kurnianingsih et al., 2015; Seaman et al., 2022). The changes in these behaviors could make OA more vulnerable to financial difficulties and greater exposure to fraud, a problem compounded by the increasing complexity of modern financial life. Various theories have been proposed to explain this phenomenon, such as the influence of aging-related decline in brain function on problem-solving abilities, or emotional changes specific to old age (e.g., the positivity effect).

The aging-related cognitive inabilities are very important to be determined by reliable and validated assessments. This leads to the importance of the current study which, not only adapted the EPT original test into a more culturally accepted version but also validated it so that users can use the test with high confidence. The significance of the study is thus to provide a comprehensive tool that can be used by practitioners like clinicians and psychologists, particularly in the Malaysian context. Numerous measurements have been used to assess problem-solving abilities in adults. Some examples of the tasks are the Wisconsin Card Sorting Test (WCST), Trail-Making Part B, and Everyday Problem Solving Test. Some of the tests that have been used in various studies on older adults are Observed Tasks of Daily Living (OTDL) Diehl (1995), Everyday Problems Test (EPT) Willis & Marsiske (1993), Everyday Problem-Solving Inventory (Cornelius, 1987) and older adult problems (Artistico et al., 2003). It can be observed that the Everyday Problem Test (EPT) has been widely used in research with older adults for the past twenty years (Burton et al., 2006; Burton et al., 2009; Pezzuti et al., 2014; Chen et al., 2017; Pavlidis et at., 2021). Most of these studies have shown high validity and predictivity for problem-solving abilities in older adults. For example, Burton et al (2006) showed that cognitive functioning was a good predictor of EPT performance. In other words, cognitive functioning is a significant determinant of problem-solving abilities that can be effectively measured by EPT. For this reason, the current study adopted the Everyday Problems Test as a measure of problem-solving ability in older adults.

Everyday Problems Test measures problem-solving performance hence known as a performance-based measure of everyday cognitive abilities in older adults. It was first developed by Willis and Marsiske in 1993. It is a printed material of problems involving everyday tasks that older adults need to solve. There are two versions of the tests. One version consists of 84 items and the other version has 42 items. There are seven scales in the EPT which are the health (medications) scale, meal preparation/nutrition scale, phone usage scale, consumer (shopping) scale, financial management scale, household management scale, and transportation scale. Willis and Marsiske (1993) included these scales with the assumption that older adults in a society can live independently. Therefore, these seven scales or domains are the most typical types of tasks that older adults encounter in everyday living. Willis and Marsiske (1993) developed two forms of the test, namely the Multiple Choice and Open-Ended forms. Participants will have to circle one out of four choices for an answer in the Multiple Choice form while those who are doing the Open-Ended form will have to answer items by writing their answers in the provided lines. Items of the test are descriptions of materials such as telephone bills, polishing products, and membership applications. These items can be in the format of forms, directions, or charts. Participants are presented with these items, after which they must answer two questions related to the item.

There have been other versions of EPT. For example, Juras et al (2022) have revised the test into 14 items. They argued such a brief version of the test is important because the long version is not suitable for a time-constraint setting. The long version can also produce a practice effect especially if it is used in longitudinal and intervention studies (Juras et al., 2022).
There are also adaptation versions of the test. For example, Pavlidis et al (2021) translated and adapted the 28-item version of EPT. They tested their adapted test on 139 older adults in Greece. The study showed a well-adapted version of the original EPT that can capture cognitive decline and everyday functioning in older adults (Pavlidis et al., 2021).
Although the original EPT has been revised and adapted to different cultures, to the best of our knowledge there has been no version that has been translated and adapted into the Malaysian culture. Consequently, the current study aims to examine: (1) the internal consistency and reliability of the original 28-item Everyday Problems Test (EPT) and the Malaysian Everyday Problems Test (MEPT) version of 14-items; (2) the relationship between everyday problem solving and demographic factors; and (3) the demographic differences in the various domains of everyday problem-solving.

Methods

Participants and Setting

The data presented in this paper are partly from the Successful Ageing: Evidence-Based Interventions to Delay Ageing Related Decline (AGEWELL) study. The AGEWELL study is a series of ongoing projects that are aimed at studying and improving the cognitive functioning of Malaysian OAs. The data presented here will include that of Everyday Problem Solving and demographic factors.
Participants were all community-dwelling and healthy OAs above the age of 59 of various ethnicities who reside within the Klang Valley vicinity. They were recruited using various methods such as poster announcements, blast Whatsapp messages, word of mouth as well as briefing sessions held at a range of locations, including Senior Citizens Clubs, places of worship, Projek Perumahan Rakyat (PPR) facilities, and community gatherings. For the purpose of this article, a total of 291 participants' data has been utilized, 53 of which completed the Everyday Problems Test (EPT) (Willis & Marsiske, 1993) and 238 of which completed the Malaysian Everyday Problems Test (MEPT), adapted from the Willis and Marsiske (1993) EPT. This study has received approval from the ethics committee of Sunway University, Malaysia.

Measures

Demographic Variables

There are a total of three demographic variables that were included as a part of this analysis, namely age, gender, and educational level. Age was included as a continuous variable ranging from 59 to 90 years. The mean age of participants was 65.92 years and 66.68 years respectively for the EPT (Willis & Marsiske, 1993) and the MEPT. Gender was included as a categorical variable where males were indicated as "1" and females were indicated as "2".
Education was included as a categorical variable as well in the analysis. On the EPT measure, participants who did not finish school were indicated as "1", participants who completed high school were indicated as "2", participants who completed a Diploma/Certificate/Bachelor's Degree were indicated as "3" and participants who completed a Postgraduate Qualifications were indicted as "4".

These indications varied slightly on the MEPT where participants whose highest education level was primary school were indicated as "1", participants whose highest education level was secondary school were indicated as "2", participants who completed a Diploma were indicated as "3", participants who completed a Pre-University programme were indicated as "4", participants who completed a Bachelor's Degree were indicated as "5", participants who completed a Master's Degree were indicated as "6" and "participants who completed a Doctor of Philosophy (Ph.D.) Degree were indicated as "7".

Everyday Problems Test (EPT)

The 28-item EPT version was used in this study to measure an OA's cognitive functioning of reasoning and problem-solving through their abilities to solve daily living tasks. It represents seven scales, namely: 1) the health scale; 2) the meal preparation/food scale; 3) the phone usage scale; 4) the consumer scale; 5) the financial management scale; 6) the household management scale; and lastly 7) the transportation scale (Willis & Marsiske, 1993). Approval to use this measure was obtained from its creators.

Malaysian Everyday Problems Test (MEPT)

The 14-item MEPT was used in this study to measure an OA's cognitive functioning of reasoning and problem solving through their abilities to solve daily living tasks that they are more familiar with within the Malaysian context. Items on the test represent the seven scales as mentioned in Willis and Marsiske (1993) but were adapted to be culturally apt, including materials that Malaysian OAs would more commonly come across in their daily lives. This measure was presented to participants in three languages, namely English, Bahasa Malaysia, and Mandarin. All translated versions of the test were subjected to Brislin's Back Translation Model (1970) to ensure the meaning of the questions was preserved to the greatest extent (Brislin, 1970).

Procedure

Participants were recruited by the means mentioned above. All participants who had been recruited were then asked to sign informed consent to acknowledge their participation in this research. They were then screened either physically, via telephone, or online by the researchers to ensure their eligibility to participate in this research. The inclusion criteria for participants are aged 59 years and above, a score of 13 and above on the Montreal Cognitive Assessment (MoCA) as suggested in (O'Driscoll & Shaikh, 2017) as an appropriate threshold in a Malaysian population for detecting the risk of mild cognitive impairment, should have the ability to make a time commitment, healthy and this includes those seeking regular medical attention and have some form of mobility (ability to walk short distances up to 3 metres). It will exclude those who have confirmed diagnosis of neurodegenerative diseases or psychiatric disorders, including those who have a history of stroke, traumatic brain injury, and Systemic Lupus Erythematosus; uncorrected auditory, and/or visual impairments, currently on psychiatric medications, immobile, require full-time caregiver assistance, and those with comprehension impediments e.g., expressive aphasia. Those who have concurrent enrolment in other studies would also be excluded.

Participants were then scheduled by a researcher to participate in a survey session, virtually or physically, based on the preference of the participants, to collect the above-mentioned data. Both these options were viable as all the measures were converted into Google Forms.

If participants chose to participate in this session virtually, two methods were used; 1) A Zoom meeting was scheduled at the convenience of the participant, with the meeting details provided to participants beforehand, in which the researcher would either conduct a structured interview to obtain participants responses, or share the link with the participants via the Zoom Chat function and allow the participants to attempt answering the questionnaire on their own by clicking on the link provided; 2) Participants independently fill in the questionnaires using the online links provided by the researcher via Whatsapp.

If the participants chose to complete the survey session physically, two methods were used; 1) Researchers would conduct a structured interview to obtain participants' responses and assist them in keying in these responses unto the Google Form on their behalf; 2) Participants independently keyed in their responses into the Google Forms, using the laptop provided by the researcher.

In any instance, the participants were always informed that the researcher will be available to address any concerns they may have with regard to the questions or assist them with technical difficulties encountered throughout the process. This session took approximately 2 hours to complete. Participants were given a break in between to ensure that the process was not overwhelming them. Once completed, participants were rewarded with a Grab Voucher valued at RM35 as a compensation for their participation in this session of the research.

Data Analysis

The purpose of the investigation was to examine: (1) the internal consistency and reliability of both the everyday problem-solving measures; (2) the relationship between demographic factors with everyday problem solving; and (3) aspects of each of the 7 domains of the everyday problem solving measures.

A Cronbach-alpha was calculated to examine the first objective for both the EPT and the MEPT. As for the second objective, Pearson or Spearman correlations were performed between the demographic variables of age, gender, and education level with performance on both the EPT and MEPT by looking at the total scores on each measure respectively. For the third objective, a one-way analysis of variance (one-way ANOVAs) was performed to compare the means of each of the 7 EPT and MEPT subscales by demographic variables. In this analysis, the scores on each EPT and MEPT domain were used as the dependent variables, and demographic variables of age group (5), gender (2), and education level (4) and (7) for the EPT and MEPT respectively were used as independent variables.

Results

Demographic Information

The demographic characteristics of the study respondents are shown in Table 1 and Table 2 according to the versions that the respondents did (Table 1 is respondents who did the EPT and Table 2 is respondents who completed the MEPT).

In reference to Table 1 for respondents who did the EPT, there were 17% of male respondents and 83% were female respondents. As for the MEPT version, there were 45.8% male respondents and 54.2 % female respondents. The mean age of respondents for both EPT and the MEPT versions are 65.92 years and 66.68 years respectively, with most respondents from Chinese background (79.2% for EPT; 47.9% for MEPT). Most respondents of the EPT have a Bachelor's Degree and completed a postgraduate qualification (34%) while most respondents in the MEPT version have a secondary school education (29.8%).

The demographic profiles of participants on each version of the test are

respectively shown in Tables 1 and 2.

Table 1
Demographic variables of Everyday Problems Test respondents.

Demographic Variable	**Number**	**%**
Gender		
Male	9	17
Female	44	83
Age		
59-65	31	57.4
66-70	11	20.8
71-75	9	17.0
76-80	1	1.9
≥ 80	1	1.9
Ethnicity		
Chinese	42	79.2
Indian	11	20.8
Education		
Did not finish school	3	5.7
Completed high school e.g. SPM/MCE, STPM/HSC or equivalent certification	14	26.4
Completed a Diploma/ Certificate/ Bachelor's Degree	18	34.0
Completed a Postgraduate Qualification	18	34.0

Table 2
Demographic variables of Malaysian Everyday Problems Test respondents.

Demographic Variable	**Number**	**%**
Gender		
Male	109	45.8
Female	129	54.2
Age		
60-64	101	42.4
65-69	69	29.0
70-74	50	21.0
75-79	16	6.7
≥ 80	2	0.8
Ethnicity		
Malay	74	31.1
Chinese	112	47.1
Indian	46	19.3
Others	6	2.5
Education		
Primary School	20	8.4
Secondary School	71	29.8

Diploma	48	20.2
Pre-University	9	3.8
Bachelor's Degree	56	23.5
Master's Degree	26	10.9
Doctor of Philosophy (PhD) Degree	8	3.4

Internal Consistency and Reliability

A Cronbach α value of ≥ 0.7 and above indicates good reliability values and a high level of internal consistency (Mohamad & Nur, 2023; Devie Dian Nisrina et al., 2023; Lim et al., 2014; Sekaran & Bougie, 2010; Konting et al., 2009). The EPT was found to have good internal consistency and reliability with a Cronbach α value of 0.733 as shown in Table 3. The internal consistency and reliability of the MEPT were also good with a Cronbach α value of 0.728. This is shown in Table 4.

Table 3
Reliability Values of the Everyday Problems Test.

Cronbach's Alpha	**Cronbach's Alpha based on Standardized Items**	**No. of Items**
.737	.755	28

Table 4
Reliability Values of the Malaysian Everyday Problems Test.

Cronbach's Alpha	**Cronbach's Alpha based on Standardized Items**	**No. of Items**
.712	.711	14

Correlational Relationships

Pearson correlations were calculated between demographic variables of age, gender, and education level with EPT total scores, and the coefficients are presented in Table 5. Age showed a negative correlation with EPT total scores, indicating that as participants' age increases, their performance on the EPT measure shows declination. However, this correlation was not found to be significant. Only gender and education level were significantly correlated with EPT total scores.

Table 5
Correlation Matrix of Demographic Variables with EPT Total Scores.

	Age	**Gender**	**Education**	**EPT Total Scores**
Age	1.00	.113	-.109	-.050
Gender	.113	1.00	.092	.309*
Education	-.109	.092	1.00	.364**
EPT Total Scores	-.050	.309*	.364**	1.00

Note. * p < .05; ** p < .01

As both gender and education level are categorical variables, scatterplots with best-fit lines and ETA correlations were calculated for these variables in relation to EPT scores as presented

in Table 6, Figure 1, and Figure 2. It appears that a weak association between gender and EPT total scores exists, with females scoring better than males on the measure. As for education, a moderate association between the variables was identified with a higher level of educational qualifications resulting in better performance on the EPT.

Table 6
Eta Correlation of Gender and Education with EPT Total Scores.

	EPT Total Scores
Gender	.309
Education	.416

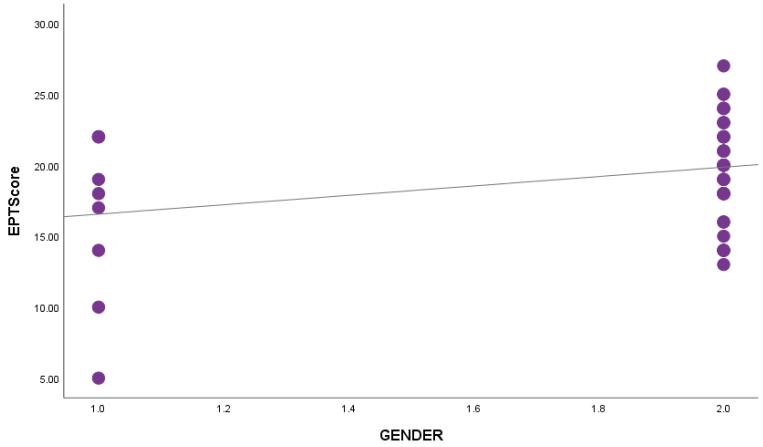

Figure 1. Scatterplot of Gender and EPT Total Scores.

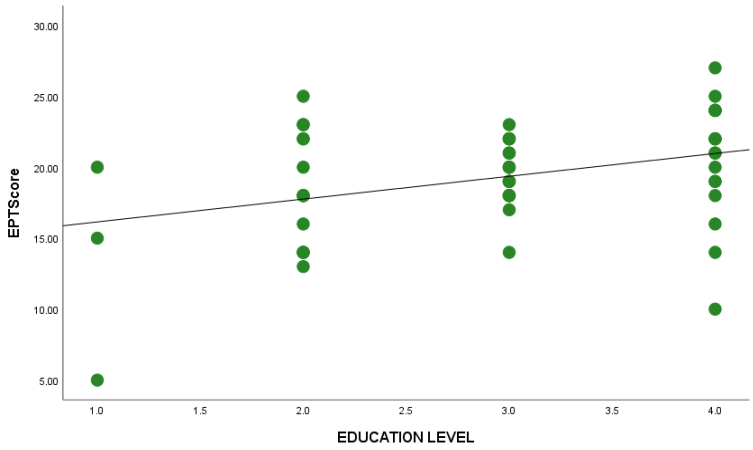

Figure 2. Scatterplot of Education Level and EPT Total Scores.

Pearson and Spearman correlations were calculated between demographic variables of age, gender, and education level with MEPT total scores, and the coefficients are presented in Table 7. Similar to the above pattern, age showed a negative correlation with MEPT total scores, indicating that as participants' age increases, their performance on the EPT measure shows declination. However, this correlation was not found to be significant. Gender also was

weak and non-significantly correlated to MEPT total scores. Only education level was significantly correlated with EPT total scores.

Table 7
Correlation Matrix of Demographic Variables with MEPT Total Scores.

	Age	**Gender**	**Education**	**EPT Total Scores**
Age	1.00	-.099	**-.062**	-.126
Gender	-.099	1.00	**-.111**	**.067**
Education	**-.062**	**-.111**	1.00	**.488****
EPT Total Scores	-.126	**-.067**	**.488****	1.00

Note. ** p < .01. Spearman correlations were calculated for all in **bold**.
The rest were calculated using Pearson correlations.

Similar to the above results, as education level is a categorical variable, scatterplots with best-fit lines and ETA correlations were calculated in relation to MEPT scores as presented in Table 8 and Figure 3. It appears that a moderate association between education and MEPT total scores exists, with a higher level of educational qualifications resulting in better performance on the MEPT.

Table 8
Eta Correlation of Education with MEPT Total Scores.

	EPT Total Scores
Education	.548

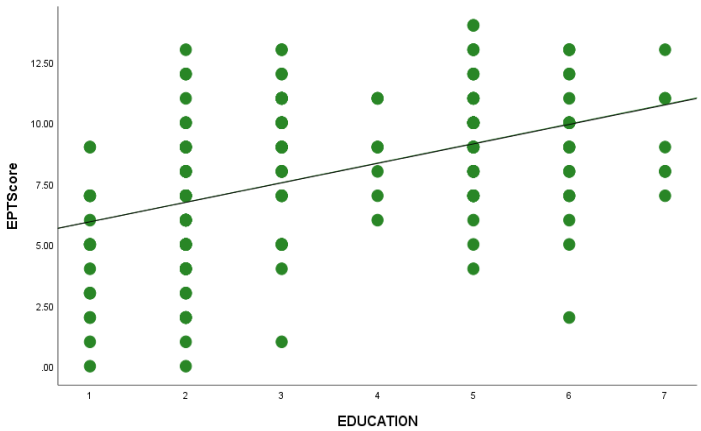

Figure 3. Scatterplot of Education Level and MEPT Total Scores.

Analysis by Everyday Problem-Solving Domain
One-way ANOVAs were performed to compare the means from each domain of both the EPT and MEPT. A significant difference in gender on the "Consumer" scale, [F(1,51) = 6.470, p = .014], and the "Food" scale [F(1,51) = 4.686, p = .035], where males scored lower than females, was discovered in the EPT. Additionally, a significant difference in educational level on the "Health" scale, [F(3,49) = 3.981, p = .013] was identified. Post hoc comparisons to

evaluate pairwise differences among group means were conducted with the use of the Tukey HSD test since equal variances were tenable. Tests revealed significant pairwise differences between the mean scores of participants who did not finish school and participants who have completed a Diploma/Certificate/ Bachelor's Degree or completed a Postgraduate qualification, $p < .05$, where participants in the latter groups scored higher in this domain. Participants who completed high school e.g., SPM/MCE, STPM/HSC, or equivalent certification do not significantly differ from the other three groups, $p > .05$. There were no significant differences in age, gender, and educational level on all the other domains of the EPT. The details of the analyses are presented in Table 9.

On the MEPT, a significant difference in educational level on 6 domains was identified, namely the "Household" scale [$F(6,231) = 4.847$, $p = .000$]; "Phone" scale [$F(6,231) = 5.605$, $p = .000$]; "Transportation" scale [$F(6,231) = 4.946$, $p = .000$]; "Consumer" scale [$F(6,231) = 6.683$, $p = .000$]; "Health" scale [$F(6,231) = 11.254$, $p = .000$]; and "Financial Management" scale [$F(6,231) = 7.615$, $p = .000$], except the "Food" scale. The means indicate a trend of lower performance in all these 6 domains of the MEPT among those who are not highly educated. A clearer representation of these differences can be seen across the compilation of mean plots for all these 6 domains in the MEPT in Figure 4. A significant difference in age group on the "Financial Management" domain was discovered [$F(4,233) = 3.116$, $p = .016$], participants within the age range of 74-79 years of age score lower in this dimension compared to participants within the age range of 60-64 ($p < .05$). Participants in the other age range groups do not significantly differ from each other within this domain, $p > .05$ but results do depict lower means scores as age increases. There were no significant differences in age, gender, and educational level in all the other domains of the MEPT. Ther results are shown in Table 10.

Table 9. One-way ANOVAs of EPT

	HOUSEHOLD	PHONE	TRANSPORTATION	CONSUMER	HEALTH	FINANCIAL MANAGEMENT	FOOD
Age Group	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
59 – 65	3.03(1.14)	2.16(0.73)	2.65(1.11)	3.23(0.99)	3.06(1.06)	3.35(1.08)	2.00(1.18)
66 – 70	3.00(1.18)	2.55(0.82)	2.64(0.92)	3.55(0.69)	2.91(0.70)	2.73(0.79)	2.09(1.14)
71 – 75	2.78(1.09)	2.22(0.97)	1.89(1.05)	2.89(1.05)	3.22(0.67)	3.22(1.09)	2.00(0.71)
76 – 80	4.00(0.00)	2.00(0.00)	4.00(0.00)	4.00(0.00)	3.00(0.00)	4.00(0.00)	1.00(0.00)
≥ 80	1.00(0.00)	2.00(0.00)	3.00(0.00)	3.00(0.00)	3.00(0.00)	3.00(0.00)	4.00(0.00)
Gender	n.s.	n.s.	n.s.	*	n.s.	n.s.	*
Male	3.00(1.32)	1.89(0.93)	2.11(1.05)	2.56(1.33)	2.78(1.20)	2.89(1.27)	1.33(1.12)
Female	2.95(1.12)	2.32(0.74)	2.64(1.08)	3.39(0.78)	3.11(0.84)	3.27(0.97)	2.18(1.06)
Education	n.s.	n.s.	n.s.	n.s.	*	n.s.	n.s.
Did not finish school	2.33(1.15)	1.67(1.53)	2.00(1.00)	2.67(1.53)	1.67(1.53)	2.00(1.00)	1.00(1.00)
Completed high school e.g. SPM/MCE, STPM/HSC or equivalent certification	3.00(1.36)	2.14(0.53)	2.29(1.07)	3.07(1.07)	2.86(0.77)	3.21(0.97)	2.00(1.04)
Completed a Diploma/ Certificate/ Bachelor's Degree	2.72(1.13)	2.50(0.79)	2.67(1.08)	3.28(0.89)	3.11(0.90)	3.33(1.03)	1.89(0.90)
Completed a Postgraduate Qualification	3.28(0.96)	2.17(0.79)	2.72(1.13)	3.44(0.78)	3.39(0.70)	3.28(1.02)	2.39(1.29)

Note: n.s. = not significant; *p<.05.

Table 10. One-way ANOVAs of MEPT

	HOUSEHOLD	PHONE	TRANSPORTATION	CONSUMER	HEALTH	FINANCIAL MANAGEMENT	FOOD
Age Group	n.s.	n.s.	n.s.	n.s.	n.s.	*	n.s.
60 – 64	1.02(0.75)	1.14(0.75)	1.43(0.59)	1.02(0.71)	1.42(0.74)	1.46(0.73)	0.69(0.76)
65 – 69	1.06(0.80)	1.29(0.73)	1.28(0.68)	1.00(0.71)	1.45(0.70)	1.32(0.72)	0.58(0.63)
70 – 74	1.00(0.83)	1.04(0.73)	1.30(0.61)	1.02(0.71)	1.50(0.68)	1.32(0.68)	0.58(0.64)
74 – 79	0.75(0.68)	1.25(0.86)	1.38(0.62)	1.13(0.72)	1.38(0.72)	0.88(0.62)	0.81(0.40)
≥ 80	0.50(0.71)	0.00(0.00)	0.50(0.71)	0.00(0.00)	1.00(1.41)	0.50(0.71)	1.00(1.41)
Gender	n.s.	n.s.	n.s.	n.s.	n.s.	n.s	n.s.
Male	0.92(0.77)	1.17(0.74)	1.36(0.60)	0.95(0.66)	1.38(0.73)	1.23(0.72)	0.69(0.68)
Female	1.08(0.78)	1.16(0.76)	1.33(0.65)	1.07(0.74)	1.49(0.70)	1.39(0.72)	0.61(0.69)
Education	**	**	**	**	**	**	n.s.
Primary School	0.50(0.69)	0.80(0.70)	0.95(0.51)	0.35(0.49)	0.70(0.66)	0.85(0.88)	0.60(0.75)
Secondary School	0.79(0.75)	0.86(0.72)	1.15(0.53)	0.86(0.72)	1.14(0.74)	1.01(0.77)	0.51(0.56)
Diploma	1.02(0.73)	1.31(0.62)	1.38(0.67)	1.13(0.64)	1.79(0.46)	1.63(0.57)	0.69(0.66)
Pre-University	1.14(0.73)	1.22(0.83)	1.56(0.53)	0.78(0.67)	1.67(0.71)	1.67(0.50)	0.67(0.71)
Bachelor's Degree	1.27(0.67)	1.43(0.74)	1.52(0.69)	1.29(0.65)	1.61(0.62)	1.54(0.57)	0.71(0.76)
Master's Degree	1.27(0.83)	1.19(0.80)	1.50(0.58)	1.27(0.53)	1.58(0.64)	1.54(0.58)	0.81(0.75)
Doctor of Philosophy (PhD) Degree	0.88(0.99)	1.75(0.46)	1.88(0.35)	0.88(0.83)	1.88(0.35)	1.38(0.74)	0.75(0.89)

Note: n.s. = not significant; *p<.05; **p<.001

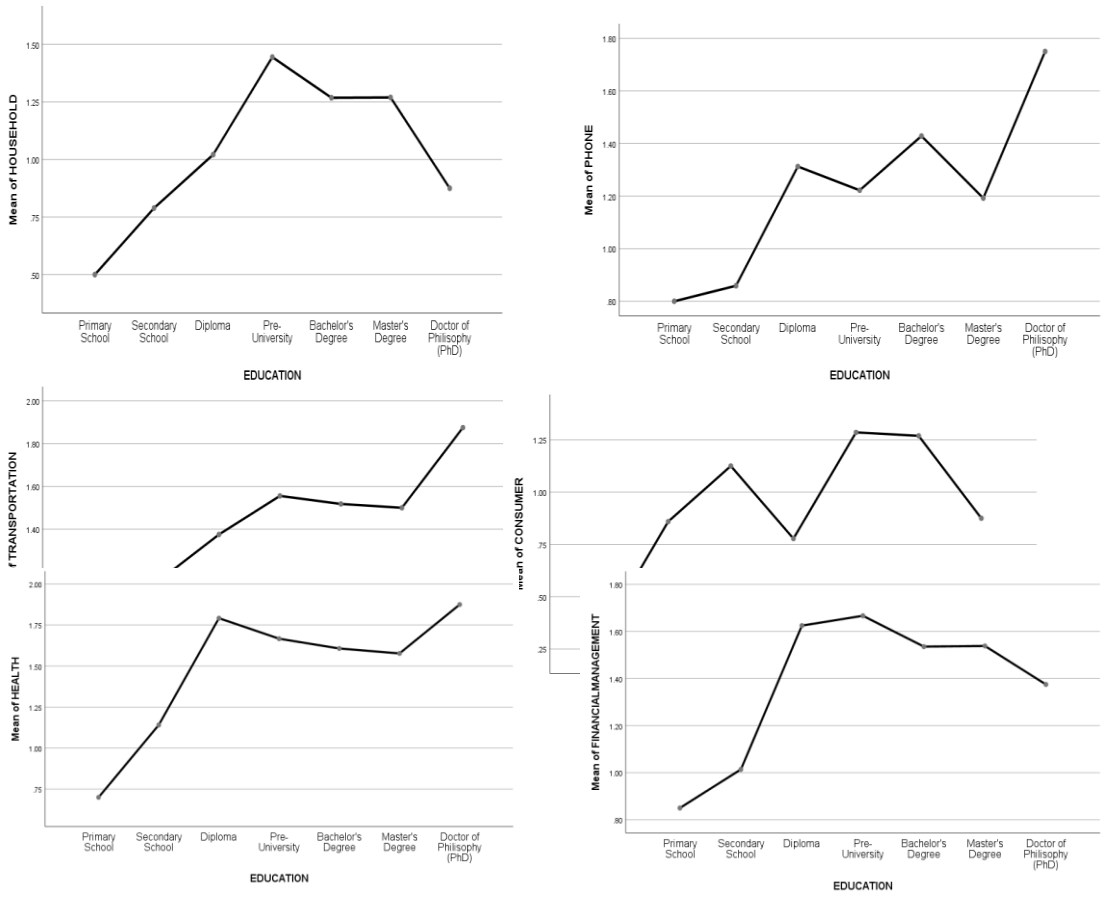

Figure 4. Compilation of Significant One-way ANOVA mean plots for MEPT

Discussion

The traditional view of aging is a decline in cognitive functions (Säljö, 2022; Cohen, 2022). Particularly, the working memory which is a crucial component in daily problem-solving and decision-making (Gaubert et al., 2022). Healthy older adults should be able to live independently without assistance in making simple daily decisions. However, it is also important to know at what point older adults can no longer sustain their autonomy and dependency due to cognitive decline. For this reason, valid and reliable instruments are needed to screen older adults' cognitive performance, particularly at solving problems. The Everyday Problems Test (EPT) first developed by Willis and Marsiske (1993) has been proven to be a good instrument for such purposes.

A common factor that can influence different results using assessments or instruments is culture. Different cultures may have a different way of life that involves daily tasks requiring well-functioning cognitive abilities. Within the Malaysian context, the need to have an effective assessment, especially in terms of its utility for clinicians to assess elderly patients, is undeniable. For this reason, the current study aimed to translate and adapt the original short version of EPT into the Malaysian context and culture. A more culturally represented problem such as a commonly used brand of medicine instructions, nutritional facts from a widely consumed cereal, and popular e-hailing related transportation materials were included in the EPT Malaysian version (MEPT).

The results showed that both EPT and MEPT versions showed good internal consistency and reliability. Particularly, the MEPT was well received by participants which suggests that the tasks are representative of Malaysian culture's everyday tasks. The suitability of the relevant and related cultural context of a test is important as human cognition can be shaped by cultural factors. Henrich et al. (2023) stated that culture does form how humans think including perceiving, remembering, and feeling. This supports the idea that considering cultural factors that lead to using appropriate cultural context in measurements is inevitable to ensure accurate measures of human psychological aspects. The current study successfully exhibited the validity of such a claim when MEPT was proven to have good internal consistency and reliability.

Another objective of the current study is to examine the relationship between everyday problem-solving and demographic factors. Three demographic factors were included in the study namely, age, gender, and education level. For both EPT and MEPT, education level emerged as a significant factor that correlated with the test scores. Participants with higher education levels scored much better on the tests than those with lower education levels. It seems that with a higher level of education, participants were able to perform the test tasks much better than those with lower education. The finding is interesting because it supports the opinion that education is important to have a better problem-solving ability. This idea has been evident in several studies. For example, in a related study by Bangma et al. (2017), they found that older adult's number of years of education significantly predicted participants' performance on the Financial Decision-Making Interview (FDMI) test. This test evaluates participants' ability and capacity to make decisions on financial issues (Bangma et al., 2017).

The current study also analysed the demographic differences in the various domains of everyday problem-solving. Both EPT and MEPT consist of 7 domains. As for the EPT, gender made a significant difference in the "Consumer" and "Health" scales where female participants performed better than male participants in these domains. Additionally, education level made a significant difference in participants' performance on the "Health" scale. OA who had high education performed much better than those without in this domain.

Concerning the MEPT, different education levels exhibited different problem-solving abilities of participants in 6 domains namely, "Household" scale, "Phone" scale, "Transportation" scale, "Consumer" scale, "Health" scale, and "Financial Management" scale. The differences indicate that OA with a high education level could do the problem-solving task much better than OA with a low education level in these domains. With regard to MEPT, the results strongly support the correlation analysis in the current study that found education level as an important factor when it comes to solving problems.

Conclusion

The findings of the current study support that the MEPT is a good version of the original 28-item version of EPT. The current findings also showed the significance of education as a factor in the ability to solve problems, in this case, daily types of problems. Future studies may address the issue of other demographic factors such as mental illness history (Qin et al., 2020). Different results might be observed when MEPT is used in older adults who had a previous mental illness such as depression and anxiety.

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