Development and Validation of the Malay Premature Ejaculation Diagnostic Tool (MAPET): A Two-Phase Study

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ABSTRACT

Introduction: A validated diagnostic questionnaire is needed in the South-East Asia region, particularly in Malaysia to detect Premature Ejaculation (PE). The objective of this study was to determine the linguistic validity of the Malay Premature Ejaculation Diagnostic Tool (MAPET). **Materials and Methods:** This study was conducted in a teaching hospital. The first phase involved experts' group discussions to develop the face, content, and factorial validity of the MAPET. The second phase measured the concurrent validity of MAPET. **Results:** We found that the MAPET has specificity, sensitivity, positive predictive value, and negative predictive value of 79.3%, 92%, 76.7% and 93.1%, respectively in the assessment of PE. The higher score indicates severity of PE. **Conclusions:** MAPET is a valid self-report instrument for the assessment of PE.

KEYWORDS: Reliability, internal consistency, Malay, premature ejaculation, diagnostic tool, validation.

INTRODUCTION

Premature ejaculation (PE) has been a focus of clinical research as it has a high prevalence in men and causes significant distress during sexual activity. In 2013, the definition of PE was further refined in the Diagnostic and Statistical Manual 5 (DSM 5).[1] The International Society for Sexual Medicine (ISSM) places much emphasis on how evidence-based medicine should guide clinical practice.[2] Considering that the global prevalence of PE is estimated at 30% across all age groups[3], screening instruments for PE should be available and tailored to diverse patient populations. A validated diagnostic questionnaire is needed in the South-East Asia region, particularly in Malaysia, where sex is considered a taboo subject and is not openly discussed in clinical settings or in society at large.[4]

Our team created a new diagnostic tool in Malay language to facilitate making the diagnosis of PE, and help in research and treatment. There are number of PE diagnostic tools currently available. The Premature Ejaculation Diagnostic Tool or PEDT was designed in accordance with the DSM IV TR criteria for diagnosing PE.[5] Since then, the PEDT has been validated and published in different parts of the word, e.g. the Turkish PEDT and Chinese PEDT.[6,7] Other tools include the Index of Premature Ejaculation or IPE and the Premature Ejaculation Profile or PEP.[8,9] Another scale is the Checklist for Early Ejaculation Symptoms or CHEES, a 5-item questionnaire derived from existing scales (PEDT, PEP and another unpublished scale).[10] The CHEES was validated using the latest definition of PE, as proposed by the ISSM and DSM 5. Our clinical team felt there was a need to develop a new assessment tool in our local language, especially with regards to acceptance to pursue this line of questioning, since existing sexual questionnaires may contain words that may be experienced as offensive in certain cultural groups.

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The aim of the present study was to develop a new locally acceptable PE questionnaire and to determine its reliability and validity. We further determined the concurrent and divergent validity of this psychometric tool to further test its psychometric properties.

MATERIALS AND METHODS

This study was conducted at the Universiti Kebangsaan Malaysia Medical Centre (UKMMC) in 2 phases. Institutional review, approval was obtained from the UKMMC Medical Ethics Committee (FF-071-2012, FF-443-2014). Participants who screened positive for PE based on the questionnaire were offered referral to medical specialist services.

We employed chi-square analysis to determine statistically significant differences between baseline characteristics and cases of PE or non-cases of PE. We assessed discriminant validity using Mann-Whitney U test, between scores on the MAPET and clinical diagnosis of PE or non-cases of PE. The optimal cutoff score of the MAPET was determined based on the coordinate's scores and trade-off between the sensitivity and specificity from the receiver operating characteristics (ROC) curve analysis. In terms of reliability, the internal consistency of the MAPET was indicated by Cronbach's alpha value (acceptable value taken as ≥ 0.7). All significant values were taken at $p< 0.05$.

The data were analyzed using the IBM Statistical Package for Social Sciences (SPSS) statistics for Window, version 20, Armonk, NY: IBM Corp. Released 2011. An exploratory factor analysis with an oblique (varimax) rotation with Kaiser Normalization was conducted to identify the factorial structure of the MAPET. The oblique rotation was chosen because strong correlations were expected between factors. To estimate the reliability of the MAPET, the coefficient alpha was calculated in addition to the item-total correlations.

Phase I Study

The development of the MAPET

The "Malay version of the Premature Ejaculation Diagnostic Tool", or MAPET, was developed with the aim to take into account the relevance of social-cultural factors in diagnosing PE in Malaysian culture. The acceptability of a sexual content issue in the daily regional context is very crucial in conservative Malaysian populations.[11]

Subjects were recruited at the Outpatient Primary Care Clinic, Hospital Universiti Kebangsaan Malaysia, 56000 Cheras, Kuala Lumpur. The study was conducted in six months from January to June 2012 using the convenience sampling method. The inclusion criteria were: (i) males (ii) those aged at least 18 years (iii) having sexually active partner, and (iv) were able to read and understand the local Malay language. The exclusion criteria were patients: (i) suffering from chronic and severe medical illness (ii) with severe mental health problems, including psychotic and mood disorders, (iii) on psychotropic medications.

In the development of the questionnaire, three main domains concerning PE with a total of 28 items were identified through a series of discussions with a panel of experts in sexology, psychiatry, urology and statistics. These domains were: A) PE prior to satisfactory sexual intercourse, B) Lack of control, and C) Stress or satisfaction with sexual partner. Initially, all relevant ideas, discussions pertaining to PE, a total of 62 items were generated. A series of focus group was done to obtain feedback on the suitability of the items and acceptability to the lay persons (3 consecutive discussions with one janitor, medical assistant, clerk and the security officer, respectively). Questions which were too long, too vague, used technical or medical jargon and overlapped in other domains were omitted. Offensive questions were discarded. The feedback was re-discussed by the panel of experts and this process was repeated at three times in order to refine the questionnaire to the acceptance stage at face value. The final questionnaire comprised 7, 10, 11 items for Domain A, B and C, respectively. A total 28 questions were then tested on the respondents.

Each item of the MAPET is rated on a Likert scale ranging from 0 *(not at all or never)* to 4 *(a great deal or all the time)*. A total score was derived for each domain by adding up all the items' scores. A higher score indicated a higher magnitude of the problem. The scoring was not revealed to the subjects as we wanted the most honest response from the respondents. The subjects were blinded to the scoring to avoid response bias. The flowchart is depicted in Figure I.

RESULTS

Phase I study
Baseline characteristics of respondents

One hundred and twenty two subjects were approached for the study, but only 104 subjects were included. Eighteen respondents were excluded from the study for the following reasons: they had other urgent appointments (5 subjects), did not feel comfortable with the questions (4 subjects), had diabetes mellitus (3 subjects), on Selective Serotonin Reuptake Inhibitor medications (4 subjects) and did not bring reading glasses (2 subjects). Therefore the response rate was 85%. In terms of ethnicity, the majority of the respondents were Malays (75%), followed by Chinese (20.2%) and Indians (2.9%). Over half (51.9%) of the respondents were in the 31- 40 years age group while 33.7% were in the 20- 30 years age group. Seven respondents (6.7%) were aged 41-50 years while the 51-60 and above 60 age groups comprised 3.8%. A majority of the respondents (83.6%) were married. Regarding the participants'

education background, 1% achieved at least diploma level, 28.8% at least a secondary education and 12.5% had postgraduate qualifications. No subjects earned less than Ringgit Malaysia (RM) 1000 per month (RM 1 = USD0.03), 25% were in the RM1000-2000 income bracket while the majority earned between RM 2000 and RM 3000. No respondents were unemployed.

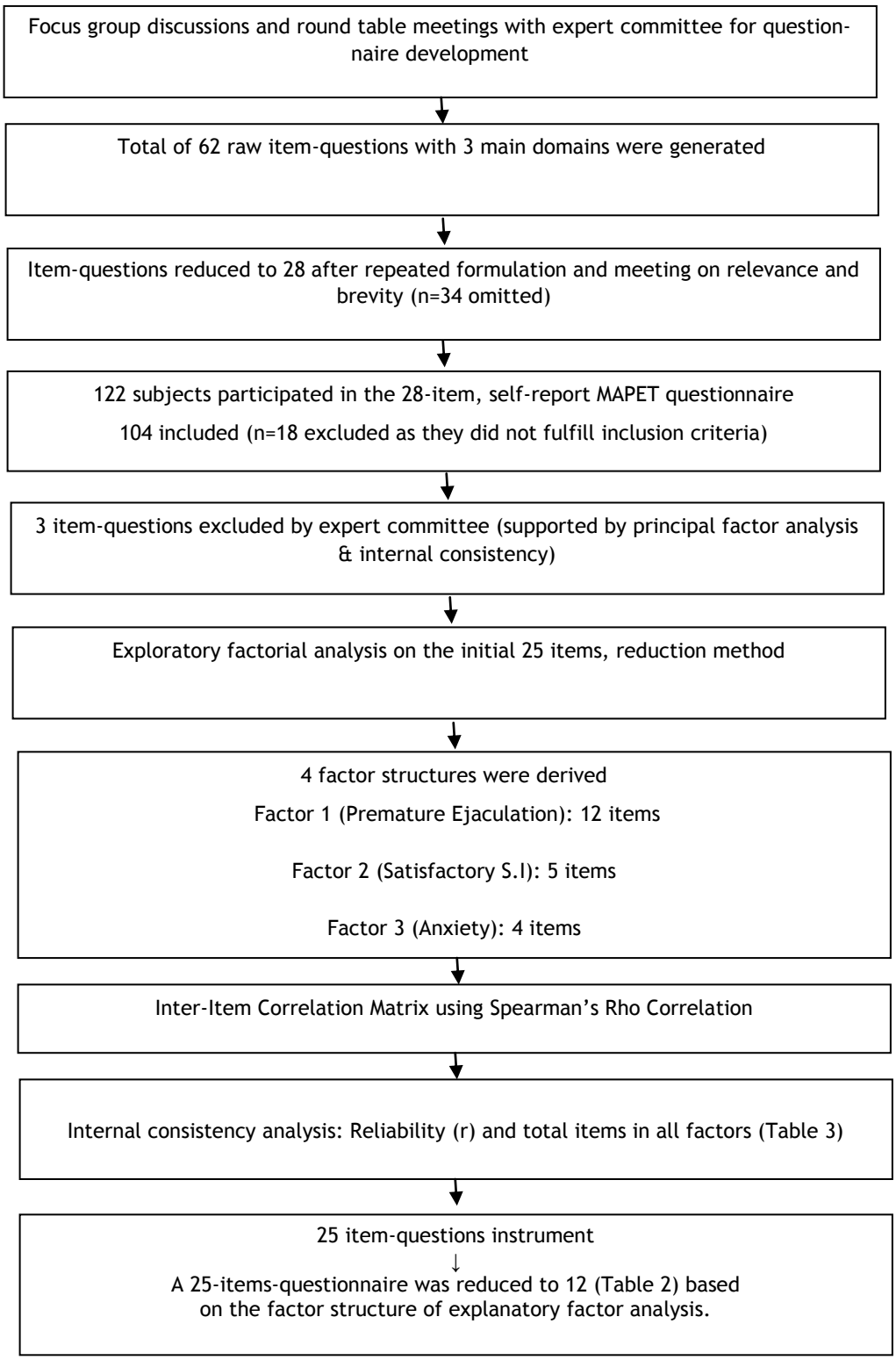

Figure I: The flow-chart of the Phase I study

Factor analysis of the MAPET

The principal factor analysis was done on the initial 28 items to identify meaningful subset/subscale of items and to continue reducing the number of items, to 25 items only. The criterion to suppress the factor loading to 0.3 was made. Item loadings lower than 0.3 were eliminated from the questionnaire (n=3). A total solution of 6 factors was explored initially. However, the solution with 4 factors was selected (Table I) which accounted for 69% of the variance. The criterion used for selecting the best structure was the magnitude of the variance obtained. The first factor, Premature Ejaculation (*ejakulasi pramatang)* comprised 12 items that assessed the core fundamentals of premature ejaculation in it. The second factor, Satisfactory Sexual Intercourse *(persetubuhan memuaskan)* consisted of 5 items which revolved around the subject's perceived satisfaction of his sexual life and his perception of his partner's satisfaction. The third factor, Anxiety *(keresahan)*, had 4 items and it included elements of stress, emotion and performance-anxiety. The fourth factor, Lack of Control (*kurang kawalan*) contained 4 items assessing the ability to control ejaculation prior to satisfactory intercourse.

Table I: Factor structure of the exploratory factor analysis in Phase I Study for 25-items MAPET (See Appendix A for English version)

Item	Factor Pattern Loading			
	PE	Satisfactory Sexual Inter-course	Anxiety	Lack of Control
1. "Berapa kerap anda berasa kesal terhadap prestasi seksual anda?"	0.615		0.376	
2. "Anda mengalami ejakulasi terlalu awal?"	0.718			0.383
3. "Anda mudah berejakulasi walaupun kurang rangsangan?"	0.772			
4. "Berapa kerap mengalami ejakulasi pra-matang setiap kali bersetubuh?"	0.770			
5. "Adakah susah untuk anda mengawal pancutan?"	0.566			0.482
6. "Anda cepat berejakulasi setiap kali bersetubuh?"	0.691			0.337
7. "Berapa kerap anda tidak dapat mengawal pancutan?"	0.801			
8. "Anda senang memancut selepas beberapa tujahan?"	0.656			0.312
9. "Anda tidak dapat mengawal pancutan seperti yang anda harapkan?"	0.710			0.406
10. "Setiap kali bersetubuh anda berasa tertekan?"	0.582		0.577	
11. "Anda risau dan kesal dengan prestasi seksual anda?"	0.589	0.385	0.397	
12. "Anda risau tidak dapat memuaskan pasangan anda?"	0.668		0.377	
13. "Adakah anda puas hati dengan kehidupan seks anda?"		0.913		
14. "Adakah anda berpuas hati setiap kali selepas persetubuhan?"		0.903		
15. "Adakah anda berpuas hati setiap kali selepas persetubuhan?"		0.888		
16. "Adakah pasangan anda berpuas hati dengan prestasi anda?"		0.867		
17. "Anda yakin pasangan anda puas dengan prestasi anda?"		0.479	0.387	
18. "Semasa bersetubuh anda berasa cemas ?"			0.869	
19. "Anda tidak menikmati hubungan yang intim disebabkan masalah pancutan awal ini?"	0.537		0.584	
20. "Saya risau masalah pancutan awal ini akan menjejaskan keharmonian rumahtangga saya?"	0.306		0.742	
21. "Saya sedih atau murung memikirkan masalah pancutan awal saya ini?"			0.658	
22. "Anda boleh mengawal pancutan sebelum masanya?"				0.712
23. "Anda dapat bertahan lama dan berpuas hati dengan prestasi anda?"		0.473		0.596
24. "Anda bangga dengan kebolehan anda mengawal pancutan?"		0.531		0.643
25. "Berapa kerap anda dapat mengawal pancutan?"				0.819
Explained variance	25.1%	18%	13.3%	12.6%

Abbreviation: PE = Premature Ejaculation

Reliability of MAPET

Table II showed the relationship of reliability indices and inter-correlations between factors. The Spearman Rho Correlation Coefficient was computed for all the four factors to determine the reliability of the individual factor in relation to the number of items. An overall Cronbach's alpha of 0.937 and item-total correlations ranging from 0.170 to 0.502 were obtained.

Table II: Inter-correlations between factors and reliability indices in Phase I Study

Factors	Premature Ejaculation	Satisfactory Sexual Intercourse	Anxiety	Lack of Control	Total Items	Cronbach's Alpha
Premature Ejaculation	1.000	0.302**	0.502**	0.484**	12	0.928
Satisfactory Sexual Intercourse		1.000	0.266**	0.486**	5	0.920
Anxiety			1.000	0.170	4	0.804
Lack of Control				1.000	4	0.821
Total score					1.000	0.937

(** p< 0.01, Spearman Correlation)

Reduction of MAPET items to 12 for brevity

The 28 items of MAPET were reduced to 12 items based on the factor structure of exploratory factorial analysis (Table I). These 12 items capture the salient aspects of "premature ejaculation", which contributed to 25.1% variance of the initial 28 item scale.

Phase II Study

In the second phase, we studied the psychometric properties of the MAPET developed in Phase I study. The concurrent validity (sensitivity and specificity) and Receiver Operating Characteristic (ROC) curve for MAPET was measured. The discriminant validity of the MAPET was measured and the optimal cutoff score for case ness (and non-case ness) of PE was also established.

The subjects for the Phase II Study were conveniently sampled from the Urology Outpatient Clinic (UOP), UKMMC. The majority of patients were males with various urological disorders, including kidney stones and urethral strictures. Consent was obtained from each patient.

This cross-sectional study was conducted from June 2015 to May 2016. The inclusion criteria were: (i) males (ii) age ≥ 18 years old; (iii) must have a female sexually active spouse; (iv) fluent in the local Malay language (written & spoken), and (v) able give to informed consent. The exclusion criteria were: (i) severe mental illness (limiting engagement and informed consent); (ii) participants with severe medical illness (e.g. sepsis, kidney stones with complications, renal failure), and (iii) participants who were not in a committed heterosexual relationship.

The sample size was determined by the rule of thumb method of 10 subjects per item in the questionnaire.[12] Hence, for the MAPET with 12 items, a total of 120 subjects were recruited. Eligible subjects were then interviewed by a researcher, SA, using the established diagnostic criteria i.e. the American Psychiatric Association's classification and diagnostic tool, Fifth Edition (DSM-V, 2013), for clinical diagnosis of lifelong PE to identify cases and non-cases of PE. SA has an experience of diagnosing and treating patients with PE and has been working for 4 years, under the supervision of a Senior Consultant Psychiatrist (HS) who are recognized as a sex therapist by the Medical Privilege and Credentialing Committee, UKMMC. Upon completion of the clinical interview, cases ("PE +ve") and non-cases ("PE-ve") of the PE, were documented by the researcher (SA), on the back of participants' questionnaire paper. Once completed, the set of questionnaires were returned to the researcher.

A summary of the baseline characteristics of study participants (n=120) is presented in Table III. Male subjects who had sexual intercourse (SI) one to two times a month were found to more likely have PE ($p < 0.02$), compared to males with more frequent SI.

The discriminant validity of MAPET's individual items and the total score in comparison of clinical diagnosis of PE and no PE was measured (Table IV). From the Mann-Whitney U test (U =180, $p \leq 0.01$), it was shown that there is a statistically significant difference in the MAPET's individual items and total scores of those clinically diagnosed with and without PE.

Concurrent Validity and optimal cut-off score of the MAPET

The cut-off score of 23 and more was chosen based on sensitivity of 79.3%, specificity of 92.0%, and positive predictive value (PPV) of 76.7% and negative predictive value (NPV) of 93.1%. The area below (AUC) of the Operating Characteristics (ROC) curve, and the optimal cutoff score for the MAPET was

calculated to determine the efficacy of this instrument to correctly identify PE cases on the basis of clinical DSM-V diagnosis. The ROC curve for MAPET against the clinical diagnosis of PE (based on DSM-V Premature ejaculation criteria) was illustrated in Figure II. The AUC for MAPET was 0.929 (CI: 0.88 – 0.97). The flowchart of Phase II study is summarized in Figure III.

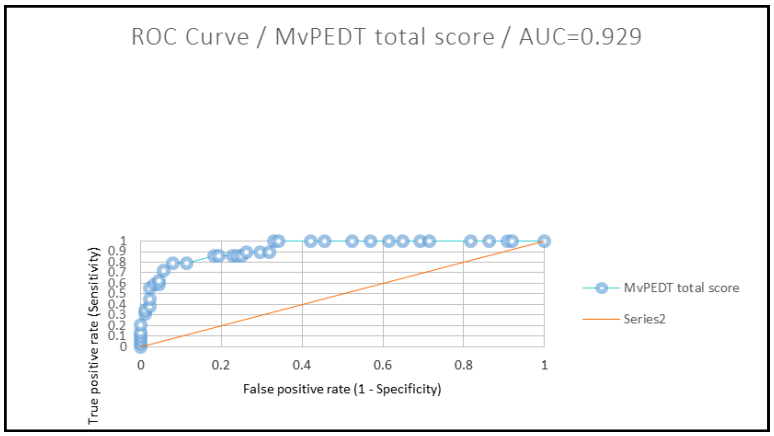

Figure II. ROC (Receiver Operating Characteristics) Curve for MAPET against the clinical diagnosis of PE (Based on DSM V Premature ejaculation criteria). The AUC for MAPET was 0.929 (CI: 0.88 – 0.97).

A 25-items-questionnaire was reduced to 12 (Table 2) based on the factor structure (factor analysis)

↓

A total of 120 subjects were recruited using a convenience sampling technique

↓

The socio-demographic data of the 120 subjects were tabulated (Table 4)

↓

Concurrent validity and the cut-off points score of MAPET vs. gold standard of clinical interview (DSM-V) was performed by a trained researcher

↓

The discriminant validity of the MAPET was examined (Table 4). A statistically significant difference in the MAPET's scores of those clinically diagnosed with and without PE was observed

↓

MAPET'S cut-off point score of ≥23 was chosen, which corresponds to a sensitivity of 79% and specificity of 92% for MAPET (Table 5). The higher the score, the higher the clinical magnitude of PE

↓

The ROC* curve based on 12-item MAPET (Figure 2) was measured. The AUC** was 0.929 (CI: 0.88 – 0.97)

↓

The internal consistency, item correlation, item deletion of MAPET were measured with a strong Cronbach's α (> 0.9) (Table 5)

↓

Development of a linguistically validated Malay-version of a PE Diagnostic Tool (MAPET-12 items)

Figure III. The flow-chart of the Phase II study.
(ROC* = Receiver Operating Characteristic; AUC** = AreaUnder the Curve)

Reliability of MAPET

The internal consistency of the MAPET instrument was assessed using Cronbach's alpha (α) and above 0.7 was considered an acceptable value.[13,14] The item correlation value, *r* above 0.4 is desirable.[15] The internal consistency, item correlation and item deletion of MAPET was in between 0.95 to 0.96 with the overall Cronbach's α was 0.92. All the items in the MAPET were closely related, at levels, *r*> 0.6. All items appeared worthy of retention; the greatest increase in alpha was from item 3, but the removal of this item would increase the alpha only by 0.01.

Table III: Characteristics of participants in the Phase II Study

Demography	Clinical diagnosis^		Level of significance, *p*^
	*PE +ve (n=30)	**PE -ve (n=90)	
Age (years)			
Median (s.d)	42 (12)	50 (13)	0.246
Marital status	all were married and sexually active		
Frequency of sexual intercourse in the last month			
None	8 (8.9%)	6 (20%)	0.10
1 to 2 times	15 (16.7%)	11 (36.7%)	**0.02**
3 to 4 times	25 (27.8%)	9 (30%)	0.81
5 to 6 times	18 (20%)	2 (6.7%)	0.09
7 to 10 times	16 (17.8%)	2 (6.7%)	0.14
≥ 11 times	8 (8.9%)	0	0.09
Race			
Malay	22 (73.3%)	74 (82.2%)	0.50
Chinese	1 (3.3%)	8 (8.9%)	0.31
Indian	6 (20%)	6 (6.7%)	**0.04**
Others	1 (3.3%)	2 (2.2%)	0.41
Education level			
Primary level	2 (6.7%)	1 (1.1%)	0.09
Secondary level	13 (43.3%)	30 (33.3%)	0.32
Certificate	8 (26.7%)	33 (36.7%)	0.32
Bachelor degree	5 (16.7%)	19 (21.1%)	0.59
Masters/PhD	2 (6.7%)	7 (7.8%)	0.84
Salary			
RM 1,000-2,000	7 (24.1%)	12 (13.5%)	0.19
RM 3,001-4,000	8 (27.6%)	27 (30.3%)	0.73
RM 4,001-5,000	6 (20.7%)	22 (24.7%)	0.62
>RM 5,000	8 (27.6%)	28 (31.5%)	0.29
Employment			
Working	22 (73.3%)	76 (85.4%)	0.17
Unemployed	1 (3.3%)	1 (1.1%)	0.41
Retired	5 (16.7%)	10 (11.2%)	0.43
Others	2 (6.7%)	2 (2.2%)	0.24
Medical illness			
Cholesterol	0	3	0.31
Prostate	8	10	**0.04**
Nephrolithiasis	2	14	0.22
Thyroid disease	2	2	0.24
Diabetes	3	16	0.31
Hypertension	10	17	0.10

*PE +ve = Postive cases for Premature Ejaculation (PE) ; **PE -ve = Negative cases for PE; p^ was based on statistic of Mann Whitney U test , U = 1145, p =0.246; ^ Clinical diagnosis based on the gold standard, the clinical interview for PE diagnosis in Diagnostic and Statistical Manual, 5th Edition, American Psychiatric Association, 2013

Table IV: The comparison MAPET item scores and the clinical diagnosis of PE (Discriminant validity of MAPET)

SCORE	CLINICAL DIAGNOSIS	N	MEAN RANK	SUM OF RANKS	U*	*P*
MAPET Q 1	PE -ve	89	52.93	4711.00	7060.01	0.01
	PE +ve	30	80.97	2429.00		
MAPET Q 2	PE -ve	90	49.83	4484.50	389.500	0.01
	PE +ve	30	92.52	2775.50		
MAPET Q 3	PE -ve	90	52.80	4752.00	6570.01	0.01
	PE +ve	30	83.60	2508.00		
MAPET Q 4	PE -ve	90	49.03	4413.00	3180.01	0.01
	PE +ve	30	94.90	2847.00		
MAPET Q 5	PE -ve	90	48.90	4401.00	3060.01	0.01
	PE +ve	29	94.45	2739.00		
MAPET Q 6	PE -ve	89	49.92	4442.50	437.500	0.01
	PE +ve	30	89.92	2697.50		
MAPET Q 7	PE -ve	90	49.36	4442.50	347.500	0.01
	PE +ve	30	93.92	2817.50		
MAPET Q 8	PE -ve	90	49.17	4425.00	3300.01	0.01
	PE +ve	30	94.50	2835.00		
MAPET Q 9	PE -ve	90	48.73	4386.00	2910.01	0.01
	PE +ve	30	95.80	2874.00		
MAPET Q 10	PE -ve	90	50.49	4544.50	449.500	0.01
	PE +ve	30	90.52	2715.50		
MAPET Q 11	PE -ve	90	49.51	4456.00	3610.01	0.01
	PE +ve	30	93.47	2804.00		
MAPET Q 12	PE -ve	90	50.33	4530.00	4350.01	0.01
	PE +ve	30	91.00	2730.00		
MAPET TOTAL	PE -ve	88	46.55	4096.00	1800.01	0.01
	PE +ve	29	96.79	2807.00		

(U* = Mann Whitney- U test PE +ve= Premature ejaculation cases; PE -ve = No Premature Ejaculation cases; U= Mann Whitney U test; p= level of significance; N=sample size). *MAPET total scores' mean difference between clinically diagnosed PE and non-PE (Mann-Whitney U test, U =180,* $p \leq 0.01$)

DISCUSSION

The development of our questionnaire was mainly guided by the fact that PE is a self-reported condition. Therefore, a culturally and linguistically appropriate tool is of paramount importance for diverse and unique populations. This study aimed to develop the MAPET and provide comprehensive data on the face, content, factorial and construct preliminary validity data for PE. An effort to determine the cut-off points for diagnostic ability has increased the value of the linguistic validity of MAPET.

The MAPET was originally developed in a first phase of the study to examine the linguistic suitability of this new tool, which involved a panel of experts, focus group discussions and construct validity in the development of this questionnaire. There were originally 25 items, which were then reduced to 12 items for simplicity and to avoid redundancy. The psychometric tool demonstrated high internal consistency and inter-item correlation in the first study, but we felt that further validation of this new instrument was needed. In terms of discriminant validity, significant difference in the scores on the instrument between clinically diagnosed (DSM-V) PE cases and non-cases were observed. Discriminant validity of a questionnaire is a powerful form of validity as outlined by DeRogatis[18] and the MAPET demonstrates this.

The ROC curve analysis reveals that the MAPET performs well in terms of the accuracy of this instrument as a diagnostic tool, as demonstrated by the higher area under the curve range with an optimal cut-off score at 23 or more, with a good specificity (92%) and sensitivity (79%). The instrument shows that higher the score, the higher the degree of clinically significant PE.

The selection of an optimal cut-off score was made based on a trade-off between maximizing the sensitivity and specificity values. A high specificity cut-off score was preferred for the instrument. This was to establish a definitive diagnosis of PE in

symptomatic individuals, rather than as a screening instrument, in asymptomatic or at risk individuals. A high specificity ensures that non-PE individuals are not mistakenly diagnosed with PE (low false positive rate).

In this study, the instrument showed high internal consistency and all 12 items were necessary for retention. This reflects that a response to one item corresponds similarly to the response to all the other items in this instrument. In other words, if one rates high or low on one item, one will also rate high or low on another item. Hence, knowing a response to one item on the instrument does help predict response to the other items.

The development of the MAPET involved several stepwise statistical procedures meeting the psychometric principles of patient reported outcomes of premature ejaculation.[19] These procedures were factorial analysis, internal consistency, known group differences, sensitivity, specificity, positive and negative predictive values.

The current instrument was validated using DSM-V and ISSM definitions for both lifelong and acquired PE, respectively. This could be seen as an additional advantage of the MAPET, in addition to its cultural appropriateness by the language used in the target population. Although English is also spoken in Malaysia, the majority of the population is not well versed in English when it comes to certain medical/health concepts. The Malay language with regards to sexual concepts refers to phrases in an oblique manner and morality is incorporated in phrasing.[4] The more polite nature of the Malay language when using sexual terms is a key factor in conversational acceptability. In keeping with this notion, the MAPET questionnaire included terms such as “pancutan awal” or “memancut”, in reference to “premature ejaculation” and “ejaculating”, respectively. This was our rationale behind the development of a new questionnaire versus an attempt at a direct translation of existing ones, which were mainly tested in native English speaking countries.

The limitations of this study include that the sampling was performed using a consecutive sampling method where the reference standard was applied first before the index test. This type of design has been shown not to change the estimates of diagnostic accuracy, as long as the same sample group undergoes the same index and reference tests.[20] A larger general population sample could be tested to further verify the psychometric properties of the questionnaire.

CONCLUSION

The MAPET is a reliable and valid instrument to establish the diagnosis of PE among Malaysian men and can be complemented as a clinical tool in the local research setting, where there is a lack of Malay -speaking sexual health experts. It is expected that with the introduction of a new scale like MAPET, the research and discussion of sexuality would be more acceptable in Malaysian society, and may benefit more than 250 million people in South-east Asia who speak Bahasa-Malay as their lingua Franca.

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