The Psychometric Properties of Beliefs about Psychological Services (BAPS) Scale among Omani University Students

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Abstract: The current study examines the psychometric properties of Beliefs About Psychological Services (BAPS) Scale (Ægisdottir & Gerstein, 2009) among Omani university students using factor analysis and criterion validity. The study sample consisted of 593 undergraduate university students (60% females). The Arabic version of BAPS was developed by the researcher and its factorial structure was examined using EFA in the first step. CFA was used in the second step to assess the factorial structure of the new EFA structure and the original American structure. The original structure was selected in this paper for its better psychometric properties. In addition, criterion validity showed good evidence of the adapted BAPS as justified by its ability to distinguish between the different groups based on gender and experience with counselling. The findings were discussed in the context of Omani counselling profession and suggestions for future research were given.

Keywords: BAPS Scale; psychometric properties; psychological services; university students.

الخصائص السيكومترية لمقياس المعتقدات نحو الخدمات النفسية بين الطلبة العمانيين الجامعيين

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الملخص:

هدفت الدراسة الحالية للتحقق من الخصائص السيكومترية لمقياس المعتقدات نحو الخدمات النفسية (;Beliefs About Psychological Services (BAPS) Scale
Ægisdottir & Gerstein, 2009) على عينة من طلبة الجامعة باستخدام التحليل العاملي وصدق المحك. تكونت عينة الدراسة من 593 طالبا وطالبة (60% إناث) من المرحلة الجامعية الأولى. تم تعريب مقياس المعتقدات نحو الخدمات النفسية والتحقق من بنيته العاملية باستخدام التحليل العاملي الاستكشافي في المرحلة الأولى، ثم تم بعد ذلك استخدام التحليل العاملي التوكيدي في المرحلة الثانية للتحقق من جودة كل من البنية العاملية الجديدة الناتجة عن التحليل العاملي الاستكشافي ومن البنية العاملية للنسخة الأصلية من المقياس. أشارت نتائج الدراسة أن الخصائص السيكومترية للبنية الأصلية للمقياس كانت أفضل ولذا فقد تم اعتماد هذه النسخة في الدراسة الحالية. بالإضافة إلى ذلك، فقد اتضح وجود مؤشرات جيدة لصدق المقياس المتمثلة في قدرته على التمييز بين المجموعات المختلفة بناء على النوع الإجتماعي والخبرة السابقة مع الإرشاد النفسي. تمت مناقشة نتائج الدراسة في سياق مهنة الإرشاد النفسي في سلطنة عمان كما تمت مناقشة بعض المقترحات للدراسات المستقبلية.

الكلمات المفتاحية: مقياس المعتقدات نحو الخدمات النفسية، الخصائص السيكومترية، طلبة الجامعة

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Introduction

Measuring beliefs about psychological services is an important step to understand how people feel towards these services and how much readiness they have to take advantage of them. In the Arab context, many measures can be found in the literature that assess individuals' awareness or attitudes towards counselling or other psychological services (e.g., Alfrayhat et al., 2015; Aljamaan & Almosawy, 2015; Asobhy, 2010, Alaylish & Nazay, 2019). However, little research has been conducted to assess the psychometric properties of these measures. Thus, the current study aims to examine the psychometric properties of the Beliefs about Psychological Services (BAPS) scale (Ægisdottir & Gerstein, 2009) in a sample of Omani undergraduate students.

It is very important for individuals to hold positive beliefs or attitudes towards counselling services in order to be able to get the most benefit from them. The Theory of Planned Behaviour (TPB; Ajzen, 1991) defines attitude as one's feeling towards the outcome of a certain behaviour (e.g., how one feels about seeking counselling). The TPB suggests that there is a strong association between an individual's attitudes to performing a behaviour (e.g., seeking counselling services) and actually performing this behaviour (seeking these services) derived by their behavioural intentions (willingness to seek counselling services). Also, the TPB stipulates that peoples' beliefs about what others' think of a specific behaviour comprise the social norms which affect intentions. Thus, a major reason for the stigma attached to seeking counselling services is engendered by the societal view of those services (Fischer & Turner, 1970).

People's tendency to seek professional help differs according to their beliefs towards this type of help. Fischer and Turner (1970) suggested that while some individuals may find it very hard and shameful to seek professional psychological help, associating this with ideas of failure and weakness, others may seek this kind of help willingly and openly for minor problems expecting a major positive change in their lives. The authors believe that such attitudinal differences underlie the actual help seeking. There are two kinds of stigma experienced by individuals. Public stigma refers to beliefs and attitudes that are derived from avoidance, refusal, and prejudice against people with mental health problems; and self-stigma that reflects self-discrimination that one applies to oneself when experiencing mental health issues (Corrigan & Watson, 2002).

People's underuse of mental health services, despite their needs, is well documented in the literature (e.g., Lannin et al., 2020; Vogel & Wade, 2006; Vogel et al., 2007; Walter et al., 2012). Some studies have shown that in spite of the high levels of positive beliefs held by the participants towards counselling services, they showed negative attitudes towards seeing a psychologist as the first step when encountering a serious problem (e.g., Alrajhi et al., 2021; Figueroa et al., 2020).

Measuring Beliefs Related to Professional Psychological Help

Different measures have been developed and utilized by researchers to assess attitudes, beliefs and stigma towards seeking professional help services. Table 1 summarizes some well-known measures.

Table 1 : Measures of Beliefs/Attitudes Regarding Seeking Psychological Help

No.	Measure	Author(s)	Participants	Dimensions/ Factors
1	Attitudes Toward Seeking Professional Psychological Help (ATSPPH)	Fischer & Turner (1970).	492 females and 468 males	1. Recognition of personal need for professional psychological help 2. Tolerance of the stigma associated with psychiatric help 3. Interpersonal openness regarding one's problems 4. Confidence in the mental health professional
2	Stigma Scale for Receiving Psychological Help (SSRPH)	Komiya & Good (2000)	311 undergraduate students	One Factor; Five questions assessing one's perceptions of stigma towards seeking psychological treatment
3	Inventory of Attitudes Towards Seeking Mental Health Services (IASMHS) A revised version of (ATSPPH)	Makenzie et al., (2004)	208 men and women from the public. + 297 undergraduate students	1. Psychological openness 2. Help-seeking propensity 3. Indifference to stigma
4	Self-Stigma of Seek-	Vogel et al.,	583 college stu-	One Factor; Ten items examining one's feeling/ atti-

No.	Measure	Author(s)	Participants	Dimensions/ Factors
	ing Help (SSOSH)	(2007)	dents	tudes towards visiting a therapist
5	Beliefs About Psychological Services (BAPS)	Ægisdottir, and Gerstein (2009)	243 undergraduate students	1. Intent 2. Stigma tolerance 3. Expertness
6	Barriers to Seeking Psychological Help Scale	Topkaya et al (2017)	205 undergraduate students	1. Fear of being stigmatized by the society 2. Trust in the mental health professional 3. Difficulties in self-disclosure 4. Perceived devaluation 5. Lack of knowledge

Aegisdottir and Einarsdóttir (2012) stated that the Attitudes toward Seeking Professional Psychological Help scale (ATSPPH; Fischer & Turner, 1970) was the most popular instrument used in the U.S. However, they showed that shortcomings have been reported for this instrument - among them is the conceptual confusion between attitudes and intentions. Moreover, some terms used in the ATSPPH are outdated. Furthermore, the items were generated by the developers of the scale and clinical psychologists, without involving help seekers in the process (Makarova et al., 2013).

Beliefs about Psychological Services (BAPS) Scale

The Beliefs about Psychological Services (BAPS; Ægisdottir & Gerstein, 2009) scale was developed to address the differences between attitudes and intentions by having a subscale measuring "intention" separate from other attitudinal items. The three subscales in BAPS - intent, stigma tolerance and expertness - were formed to reflect the main aspects of TPB. Intent corresponds with 'behavioural intentions', stigma tolerance corresponds with 'social norms', and expertness with 'attitudes' (Aegisdottir & Einarsdóttir, 2012).

Ægisdottir and Gerstein (2009) utilized two main sources for the initial pool of items. The first one was the ATSPPH (Fischer & Turner, 1970) from which 14 items were adapted. Items were rephrased to be suitable for services provided by psychologists only - including counsellors - and not by therapists or other mental health providers. The second source was a pilot study involving 39 undergraduates who were asked to write about their beliefs towards psychologists and their services. The first pool of items from these two sources consisted of 29 items in total that were subsequently reviewed. It should be noted that Ægisdottir and Gerstein (2009) treated the two terms 'attitudes' and 'beliefs' as synonymous. Although the term 'beliefs' was used in the questionnaire name, the theoretical background, including the TPB utilized by the researchers, reflects the term 'attitude'. Therefore, the current study made no attempt to differentiate between the two terms.

The first version of the questionnaire was administered to 243 undergraduate students; exploratory factor analysis (EFA) was used to explore the factorial structure of the questionnaire. The final structure of the BAPS comprised 18 items sorted into 3 factors - intent, stigma tolerance, and expertness - which together explained 48% of the total variance.

Ægisdottir and Gerstein (2009; p. 203) defined the three factors as follows: intent (6 items) reflects "a person's willingness or intent to seek psychological services"; stigma tolerance (8 items) represents "labelling, stigma, and negative feeling about psychotherapy"; and expertness (4 items) refers to "the unique characteristics of the professional counselling". Confirmatory Factor Analysis (CFA) was then used to test the structure validity of the BAPS as two models were tested. The first model consisted of the three factors explored by the EFA and the second model was a one factor model. The researchers reported that the model containing the three factors was the best model with better values of fit indices.

Of the few studies, to the researcher's knowledge, that have adapted and examined the psychometric properties of BAPS in different cultures such as Spain (Figueroa et al., 2020), Iceland (Aegisdottir & Einarsdóttir, 2012), and Latvia (Makarova1 et al., 2013), almost all of them did not precisely replicate the original American version. For example, Figueroa et al. (2020) confirmed the three factor structure as proposed by Ægisdottir & Gerstein (2009) but with some changes (i.e., item no. 18 was allowed to load on the intent subscale instead of the stigma tolerance subscale, and three item residuals were correlated). Also, the Icelandic version (Aegisdottir & Einarsdóttir, 2012) did not confirm the original structure since new culturally specific items

were added to the 18 items in the original BAPS. Makarova1 et al. (2013) found small differences in item loadings in 'intent' and 'stigma tolerance' in contrast to the original version; in addition, they found 'expertness' to be a very weak factor as only two items loaded, and it had low internal consistency. Thus, some items were rephrased and new culturally specific items were added to 'expertness'.

Known-Group Validity of Beliefs towards Psychological Services

A lot of previous studies have utilized two types of groups as criteria to examine the criterion validity of different beliefs' questionnaires. The first one is gender differences in beliefs towards psychological services. The second one is differences based on previous experience with these services. 'Known-group' validity is a well-known term for this type of criterion validity (e.g., Ægisdottir & Gerstein, 2009; Makenzie et al., 2004). With respect to gender differences, many studies have shown that women have greater belief in psychological services and a higher tendency for help seeking (e.g., Ægisdottir & Gerstein, 2009; Çebi & Demir, 2020; Chen & Chandrasekara, 2016; Fischer & turner, 1970; Makenzie et al., 2004; Topkaya, 2021; Walter et al., 2012). More specifically, in some studies females scored higher in 'intent' (e.g., Aegisdottir & Einarsdóttir, 2012; Figueroa et al., 2020; Makenzie et al., 2004); in 'expertness' (e.g., Aegisdottir & Einarsdóttir, 2012); and in 'stigma tolerance' (e.g., Makenzie et al., 2004). However, other studies found no differences in 'expertness' (e.g., Figueroa et al., 2020) or 'stigma tolerance' (e.g., Aegisdottir & Einarsdóttir, 2012; Figueroa et al., 2020) based on gender.

There were no Arab studies found, to the researcher's best knowledge that examined gender differences in these specific dimensions (i.e., intent, stigma tolerance, and expertness) of beliefs towards psychological services. However, some Arabic studies highlighted the higher levels of general attitudes towards seeking psychological services among female students compared to male students (e.g., Alaa Aldayn, 2011; Asobhy, 2011; Rayan & Jaradat, 2016).

Further evidence of 'known- group' validity for beliefs towards psychological services' questionnaires is provided by their ability to differentiate between individuals who already had a help-seeking experience (i.e., already benefited from psychological services) and those who had not. In terms of the total score, almost all studies indicated higher posi-

tive beliefs among individuals who had previous experience with psychological services (e.g., Ægisdottir & Gerstein, 2009; Çebi & Demir, 2020; Fischer & turner, 1970; Topkaya, 2021; Walter et al., 2012). Regarding each dimension, Aegisdottir and Einarsdóttir (2012) stated that participants with previous counselling experience expressed greater intent and stigma tolerance than those with no previous experiences; but no differences were found in participants' beliefs in counsellor's expertness. In a similar vein, past use of professional psychological help correlated significantly and moderately with 'psychological openness' and 'help seeking propensity;' however, a significant but weaker correlation was found between past use of professional psychological help and 'indifference to stigma' (Makenzie et al., 2004).

Few Arabic studies showed that individuals with previous counselling experience showed higher general attitudes towards seeking psychological help compared to those who didn't have previous experience with counselling (e.g., Asobhy, 2010).

To put it all together, the current study attempted to develop the Arabic version of the BAPS scale and examined its psychometric properties using two types of factor analysis (EFA and CFA) and using criterion validity.

Research Problem

Since psychological services are very important for individuals with mental health issues, developing sound measures to assess beliefs about these services is essential. Unfortunately, based on the researcher's knowledge, there have been no Arabic measures developed to assess beliefs towards psychological services targeting the three dimensions (intent, stigma tolerance, and expertness). Almost all of the developed Arabic questionnaires were designed either to assess awareness of basic or expert psychological counseling services in specific institutions or to examine general attitudes towards them (e.g., Alaylish & Nazay, 2019; Alfrayhat et al., 2015; Asobhy, 2010; Marzoq, 2011). Moreover, all of the available questionnaires were developed by individual researchers and most of them form parts of master theses, that is, each study has its own unique questionnaire. There have been no replications in their use, no validation or psychometric examination and no specific theory used to develop them. Thus, none of these measures designed for an Arab context can be relied on by researchers and professionals. As a result, due to the wide use of the BAPS in different cultures and the clear theoretical

basis upon which it was developed, the researcher in the current study decided to use the BAPS and examine its psychometric properties in an Arabic context. The BAPS was administered to undergraduate students to examine their beliefs regarding counseling services provided by the Student Counseling Center in Sultan Qaboos University. Henceforth, any mention of 'psychological services' refers to counseling services.

To approach the current research problem, the researcher used EFA and CFA to examine the factorial structure of BAPS. Although using CFA in the same sample used with EFA doesn't yield cross-validation, but it can be a stricter assessment of the factorial structure resulting from the EFA as the items are allowed to load in their respective factors based on the EFA (Ægisdottir & Gerstein, 2009). Moreover, the study utilized criterion validity, or as referred to "known- group" validity to investigate the BAPS ability to distinguish between different groups based on gender and previous experience with counseling.

The Significance of the Study

The significance of the current study is represented in the following:

1-This study will provide a well-known and sound scale to measure individuals' beliefs towards psychological services which will add to the Arabic literature that lacks common and well developed scales in this area.

2-The adapted version of the BAPS scale will be a useful tool for professionals and counsellors to understand people's beliefs towards psychological services from different angles (i.e., their intent to seek psychological services, their level of stigma tolerance, and their trust in counsellors' expertness).

3-Having an adapted version of BAPS scale in the Arabic context will help researchers to conduct further descriptive, predictive, and experimental studies in the field which rely on psychometrically reliable measure.

Population

The study population consisted of 16090 Omani undergraduate university students who were enrolled in Sultan Qaboos University in the Sultanate of Oman during fall 2019 (Deanship of Admission and Registration, personal contact September 24, 2019).

Sample

The study sample consisted of 593 students (60% females) representing 3.68% of the population. The questionnaire was sent to all undergraduate students' emails. The participants were enrolled in different colleges but most of them were from the College of Economics and Political Sciences (17.7 %) and the College of Arts and Social Sciences (17.2%). They were studying in different academic years (most of them were in first, 33.9%, and second, 27.2% years).

Instrument

The researcher utilized the BAPS developed by (Ægisdottir & Gerstein, 2009). Ægisdottir and Gerstein (2009) administered the BAPS to 243 undergraduate students in USA. The final version of the questionnaire consisted of 18 items classified into three factors: intent (6 items, $\alpha = 0.82$; e.g., At some future time, I might want to see a psychologist), stigma tolerance (8 items, $\alpha = 0.78$; e.g., I would feel uneasy going to a psychologist because of what some people might think), and expertness (4 items, $\alpha = 0.72$; e.g., Psychologists provide valuable advice because of their knowledge about human behavior). A 6 point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree) was used. The participants were asked to indicate their degree of agreement; the higher the score is, the higher is their beliefs. The 'neutral' option was not included to encourage respondents to express a more positive or a more negative belief (Ægisdottir & Gerstein, 2009).

The questionnaire was translated from English to Arabic by the researchers in a previous descriptive study (Alrajhi et al., 2021). Some words were changed to make them more appropriate to counselling services; for instance, 'psychologist' was changed to 'counsellor' and 'psychological services' was changed to 'counselling services.' The questionnaire was sent to three English language experts (i.e., ELT teachers) to review the translation. Some modifications in wording were made based on this review. The Arabic version was evaluated by reviewers specialized in psychology, counselling, evaluation and measurement. No items were deleted, but modifications were made to some items based on reviewers' comments.

Procedures

The BAPS was converted to a digital form by the Planning and Statistics Department in the university and sent via e-mail to all university students. The purpose of the study, the assurance of confidentiali-

ty of the data, and students' consent were outlined in the e-mails. The questionnaire was sent out and 593 completed electronic forms were obtained.

Results

Data were screened for normality, linearity, multi-collinearity, and singularity, and they revealed no reason for concern. No missing data were identified for any items. The psychometric properties of the original version of BAPS was examined following 5 steps: (1) Initial descriptive analysis of the original BAPS, (2) Exploratory Factor Analysis (EFA) of the original BAPS (i.e., based on the theoretical model), (3) Confirmatory Factor Analysis (CFA) of the original BAPS, (4) CFA of the new structure emerging from EFA, and (5) Known-group validity (criterion validity).

Table 2 : Initial Analysis of the Original BAPS

Items.	Intent	Stigma Tolerance	Expertness	M	SD	Test-retest	α	intent	Stigma Tolerance	Expert-ness
Intent	*Corrected item-total correlations*							*Pearson Correlation Coefficient*		
1	0.51			3.85	1.46					
2	0.69			3.65	1.65					
3	0.73			4.32	1.53					
4	0.65			4.48	1.49					
6	0.59			2.70	1.45					
12	0.58			4.07	1.51					
Total				**3.84**	**1.14**	**0.80**	**0.84**		**0.47****	**0.65****
Stigma tolerance										
5		0.45		4.41	1.65					
8		0.44		5.34	1.19					
10		0.44		5.49	1.08					
11		0.36		3.34	1.71					
13		0.39		4.47	1.27					
15		0.46		4.09	1.49					
17		0.40		3.92	1.56					
18		0.34		4.53	1.49					
Total				4.48	1.05	0.56	0.71			0.45**
Expertness										
7			0.58	4.23	1.34					
9			0.49	4.26	1.45					
14			0.58	4.48	1.40					
16			0.64	4.57	1.28					
Total.				**4.38**	**1.14**	**0.62**	**0.77**			

Note: all statistics are based on the actual sample (n= 593) except for the test-retest is based on the pilot sample (n= 22). ** Significant at 0.01 level

Initial Analysis of the Original BAPS

In the current study, the reliability of BAPS was assessed using the test-retest method and the internal consistency (Cronbach Alpha). A test-retest method was conducted in a pilot sample consisting of 22 university students with two weeks' duration be- As it is seen from Table 2, the adapted version of the original BAPS showed good test-retest reliability ranging from 0.56 for "stigma tolerance" to 0.80 for "intent"; and good internal consistency as Cronbach's alpha values ranged between 0.71 for

tween the two tests. Table 2 shows descriptive statistics of the three factors, Cronbach's alpha, test-retest reliability, corrected item-total correlations between each item and its relevant factor, and Pearson Correlation Coefficients between the three factors.

"stigma tolerance" and 0.84 for "intent". In addition, the three factors correlated moderately and significantly as the correlation coefficients ranged between 0.45 between "stigma tolerance" and "expertness" and 0.65 between "intent" and "expertness".

Exploratory Factor Analysis of the Original-BAPS

The 18 item version of the translated BAPS was subjected to exploratory factor analysis using Principal Components Analysis (PCA). Assumptions of PCA were met, that is, inter-item correlations were below 0.8, suggesting no multicolinearity. In addition, the value of Kaiser's measure of sampling adequacy (KMO) was 0.90 which falls within the acceptable range and thus suggests good sample adequacy. Also, Bartlett's test of sphericity was significant, showing that the correlation matrix was not an identity matrix ($X2$ [153] = 3499.34, p < 0.001).

No particular number of factors were specified and the eigenvalue was set to greater than one (Tabachnick & Fidell, 2014). The initial unrotated PCA resulted in a factor model of three factors as indicated by the scree plot and the eigenvalues (5.97, 1.86, and 1.20 for the three factors respectively). However, the item loadings pattern of this unrotated factors model was difficult to interpret and theoretically less meaningful. Thus, oblique rotation (i.e., Direct Oblimin) was used as it is a better option for rotation when the inter-correlation coefficients between factors are high (i.e., r > 0.32) (Costello & Osborne, 2005) and because this type of rotation assume the factors are correlated (Tabachnick & Fidell, 2014).

This analysis resulted in three factors corresponding to the eigenvalue rule and the scree plot. Table 3 displays the items loadings under each of the factors, descriptive statistics, and Cronbach's Alpha for the emerging factors.

Table 3 : Item loadings, Descriptive Statistics, and Cronbach's Alpha of the Arabic Version of the BAPS Scale

Item No.	Items	Factor 1	Factor 2	Factor3
1	If a good friend asked my advice about a serious problem, I would recommend that he /she see a psychologist.	0.56		
2	I would be willing to confide my intimate concerns to a psychologist.	0.67		
3	Seeing a psychologist is helpful when you are going through a difficult time in your life.	0.77		
4	At some future time, I might want to see a psychologist.	0.73		
6	If I believed I were having a serious problem, my first inclination would be to see a psychologist.	0.62		
7	Because of their training, psychologists can help you find solutions to your problem.	0.66		
9	Psychologists are good to talk to because they do not blame you for the mistakes you have made.	0.57		
12	I would see a psychologist if I were worried or upset for a long period of time.	0.76		
14	It is good to talk to someone like a psychologist because everything you say is confidential.	0.70		
16	Psychologists provide valuable advice because of their knowledge about human behaviour.	0.68		
18	If I thought I needed psychological help, I would get this help no matter who knew I was receiving assistance.	0.53		
5	I would feel uneasy going to a psychologist because of what some people might think.		0.58	
8	Going to a psychologist means that I am a weak person.		0.71	

Item No.	Items	Factor 1	Factor 2	Factor3
10	Having received help from a psychologist stigmatizes a person's life.		0.77	
13	Psychologists make people feel that they cannot deal with their problems.		0.47	
11	There are certain problems that should not be discussed with a stranger such as a psychologist.			0.68
15	Talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.			0.51
17	It is difficult to talk about personal issues with highly educated people such as psychologists			0.60
Eigenvalue		5.97	1.86	1.2
Variance		33.16	10.37	6.66
Number of items		11	4	3
M		4.10	4.99	3.78
SD		1.00	0.91	1.17
Cronbach's alpha		0.88	0.64	0.57

Factor 1: Intent and Expertness; Factor 2: Stigma; Factor 3: Inability to talk with counselors

The three factors together account for 50.20% of the total variance with factor one explaining 33.16 %, factor two explain 10.37%, and factor three explaining 6.66% of the total variance. However, the factor structure of this analysis was different from the original BAPS. The EFA results showed that the 'intent' and 'expertness' factors, in addition to item 18 from 'stigma tolerance', were merged in one factor (Factor 1). On the other hand, the 'stigma tolerance' factor was divided into 2 factors (Factor 2 and 3). A closer look at the factor 1 items suggests that these items express intent, and trust regarding the counsellor's proficiency. It is also worth noting that item 18 was the only item which was removed from the 'stigma tolerance' factor to merge with Factor 1. Factor 2 was a part of the 'stigma' factor and it includes 4 items (5, 8, 10, and 13). It is very clear that all these four items represent the stigma felt by the students' if they visit a counsellor. Finally, factor 3 includes 3 items (11, 15, and 17) which were also a part of the 'stigma' factor of the original structure. These items suggest that the students' feel that talking about their problems with counsellors is the same as talking with unqualified strangers.

In addition, it can be seen from Table 3 that Cronbach's Alpha was 0.88 for Factor 1, 0.64 for Factor 2, and 0.57 for Factor 3. Item-total correlation ranged from 0.49 to 0.74 in Factor 1, from 0.33 to 0.50 for Factor 2, and from 0.34-0.44 in Factor 3.

Confirmatory Factor Analysis of the Original BAPS

Confirmatory Factor Analysis (CFA) using the Maximum Likelihood method was conducted for the original structure of BAPS (Ægisdottir & Gerstein, 2009) using AMOS 23. Figure 1 shows the standardized parameter estimates. All loadings were higher than 0.35. Model fit was examined statistically via χ^2/df (lower value indicates better fit); in addition to other fit indices: NFI, IFI, TLI and CFI (values approaching 1 indicates better fit), and RMSEA (values equal to or lower than 0.08 can be considered as acceptable fit) (Hooper et al., 2009). The model fit indices for the current model (original model) are presented in Table 4.

The CFA results demonstrated that all fit indices were almost the same for both models. In addition, all loadings were higher than 0.35 and their values in both models were very close to each other. However, a careful look at the new structure of the BAPS that was based on the EFA suggests that the original model of the BAPS as applied in the Omani context resulted in a much better structure. First, the distribution of items in the new structure is not meaningful since the factors resulted from the EFA were

very different from the original structure and seem to have crossed meanings (i.e., factors 1 and 2 of the original model merged in one model in EFA; also, the stigma tolerance factor was divided into two factors). Additionally, the new factors do not measure distinguished aspects- that can be precisely named- of beliefs towards psychological services. Second,

the Cronbach's Alpha and item-total correlations in the new structure (as shown in Table 3) are lower than the original one (as shown in Table 2). Thus, the researcher decided to adapt the original structure of BAPS as suggested by Ægisdottir and Gerstein (2009).
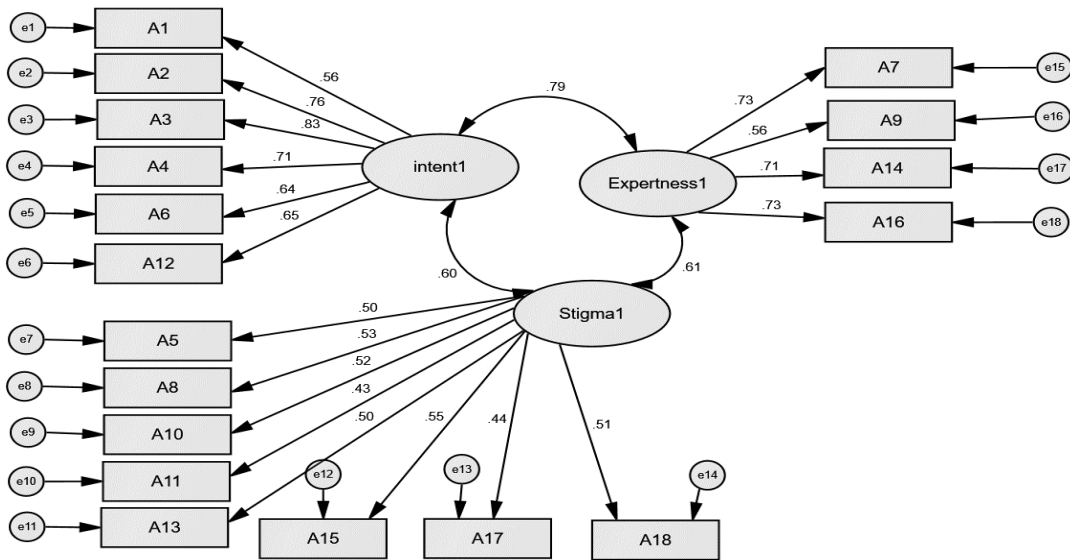
Figure 1 :CFA of the BAPS Original Model
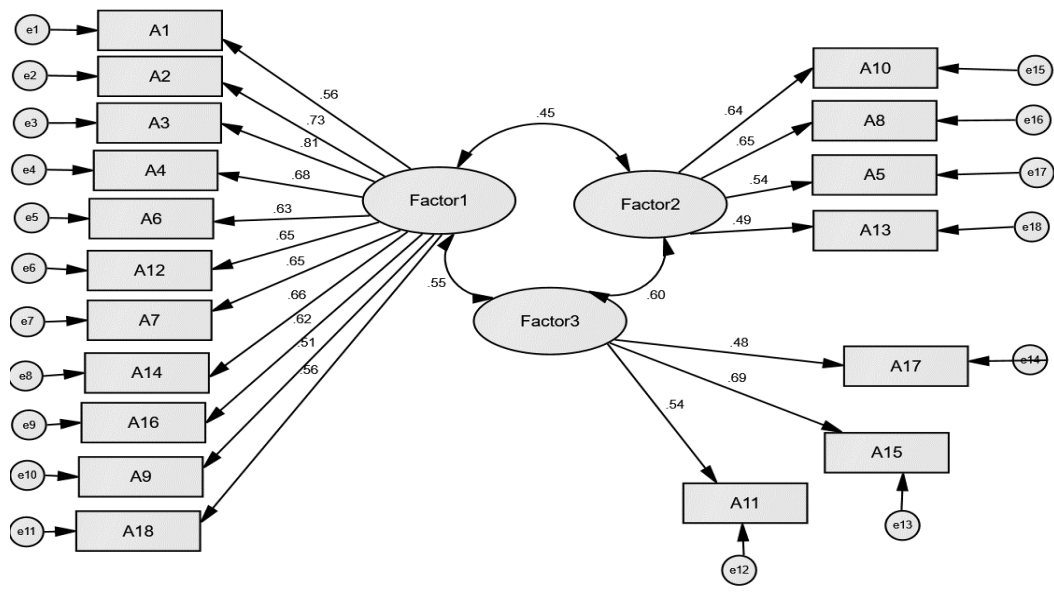

Figure 2: CFA of the BAPS New Model

Table 4 :Fit Indices of the Original and the New Models

Model	χ^2/df	NFI	IFI	TLI	CFI	RMSEA
Original model	3.95 P < 0.001	0.85	0.88	0.86	0.88	0.07
New model	3.86 P < 0.001	0.85	0.88	0.87	0.88	0.07

Know-Group Validity of BAPS

To investigate the known-group validity of the original model of BAPS, the differences in students' beliefs towards counseling services were examined based on each factor and on the total score. Students' gender and their previous benefits from counseling services were utilized as two main criteria.

Differences in BAPS Based on Gender

A one way MANOVA was used to explore the differences in students' beliefs towards psychological services based on gender. First of all, tests of normality, multicolinearity and linearity were conducted and found to be acceptable. The MANOVA results indicated that there were significant differences in students' beliefs towards counseling based on gender (Wilks' Lambda= 0.98, F= 3.93, P= 0.008). A Bonferroni correction was used to adjust the alpha level in the test of between subject effects; therefore, comparisons were made at an alpha level of 0.016 (0.05/3). Table 5 demonstrates the results of the test

of between subject effects, which were carried out to examine the differences in each factor.

As made clear from Table 5, there were statistically significant differences in the 'stigma tolerance' factor of BAPS (P= 0.002) based on gender. Female students (M= 4.56) exhibited higher levels of stigma tolerance compared to male students (M= 4.35).

Regarding gender differences in the total score of BAPS, an independent sample t-test was conducted. The results indicated that there were statistically significant differences (t= 2.06, P= 0.039) between males (M= 4.16) and females (M=4.30) in which females presented more positive beliefs towards psychological services.

Differences in BAPS Based on Previous Experience with Counseling

Students' past experiences with counseling services were examined in terms of three main counseling programs provided by the Student Counseling Center in the university.

Table 5 :Results of Test of between Subject Effects for the Differences in BAPS based on Gender

Source	SS	MS	F (1, 591)	P	η^2
Intent					
Gender	0.26	0.26	0.19	0.65	-
Error	775.53	1.31			
Stigma Tolerance					
Gender	6.49	6.49	9.35	0.002	0.016
Error	410.31	0.69			
Expertness					
Gender	2.96	2.96	2.65	0.104	-
Error	659.63	1.11			

In the questionnaire, the participants were asked whether they had previously benefited from the counseling services provided by the center. The three programs were individual counseling, group counseling, and guidance programs (including developmental counseling lectures, outreach counsel-

ing, discussion session, and workshops). These three types of programs were chosen due to their different natures, which are expected to impact differently on students' beliefs towards counseling services.

One way MANOVA was used to investigate the differences in students' beliefs towards psychological services regarding the three programs. Because

of the big difference in the number of students who benefited from the programs (n=57 for individual counseling, n=43 for group counseling, and n= 128 for guidance programs) compared to those who did not (n=536 for individual counseling, n=550 for group counseling, and n= 465 for guidance programs), a random sample was selected from the students who benefitted equal to the number of students who did not in all three programs. Three different MANOVA models were conducted because of the different students in each program. One way MANOVA results showed that there were no statistically significant differences in students' BAPS based on their previous experience with group counseling (Wilks' Lambda= 0.93, F= 1.93, P= 0.131) nor with a guidance program (Wilks' Lambda= 0.94, F= 2.27, P= 0.081). On the contrary, students' previous experience with individual counseling showed statistically significant differences in students' beliefs (Wilks' Lambda= 0.82, F= 7.60, P= 0.000) between students who had already experienced individual counseling and those who had not. The effect size (partial eta square) showed that 17% of the variance in students' BAPS was attributed to their past experience with individual counseling which is considered a large effect based on Cohen's criteria (Lakens, 2013).

Table 6 displays the test of between subjects effects for the differences in BAPS based on past experience with individual counseling. A Bonferroni correction was used; therefore, significance was recorded at an alpha level of 0.016.

The results in Table 6 indicates that there were statistically significant differences in the 'intent' and 'stigma tolerance' factors of students' BAPS based on their past experience in individual counseling. However, there were no statistically significant differences in the 'expertness' factor. Students with previous experience had higher level of intent (M= 4.57) than those who did not have experience (M= 3.76). Also, students with previous experience had higher levels of stigma tolerance (M= 4.76) than those who did not have experience (M= 4.35). The effect size shows that 12% of the variance in students' intent to seek psychological services was attributed to their past experience with individual counseling; which is considered a medium effect size according to Cohen's criteria. Furthermore, 5.6% of the variance in students' stigma tolerance was attributed to their past experience with individual counseling; which is considered a small effect size according to Cohen's criteria (Lakens, 2013).

To examine the differences in the total score of BAPS, independent sample t-tests were conducted for each type of the counseling programs (individual, group, guidance). The results showed that there were no statistically significant differences in the students' BAPS based on their past experience with group counseling (t=0.92, P= 0.356), and no differences based on their past experience with guidance programs (t=0.18, P= 0.062).

However, there were statistically significant differences in the students' BAPS based on their past experience with individual counseling (t=3.46, P= 0.001). The students who had previous experience with individual counseling (M=4.68) had higher levels of BAPS than those who did not have previous experience (M= 4.17).

Table 6 : Results of Test of between Subject Effects for the Differences in BAPS based on Previous Experience with Individual Counseling

Source	SS	MS	F (1, 112)	P	η^2
Intent					
Individual counseling	18.96	18.96	15.76	0.000	0.12
Error	134.72	1.20			
Stigma Tolerance					
Individual counseling	4.79	4.79	6.61	0.011	0.056
Error	81.12	0.72			
Expertness					
Individual counseling	2.04	2.04	2.24	0.137	-
Error	101.78	0.90			

Discussion and Conclusion

The current study aimed to examine the psychometric properties of the Beliefs about Psychological Services (BAPS; Ægisdottir & Gerstein, 2009) scale in an Arab context. EFA and CFA were used to examine the original American context structure proposed by Ægisdottir and Gerstein (2009). The EFA findings suggested a different structure from the original one. The 'intent' and 'expertness' factors and one item from 'stigma tolerance' merged together into one factor. Additionally, the 'stigma tolerance' factor was divided into two factors. This result was very similar to the limited number of previous studies that examined the factorial structure of BAPS using EFA. Previous versions of BAPS including Spanish (Figueroa et al., 2020), Latvian (Makarova1 et al., 2013), and Icelandic (Aegisdottir & Einarsdóttir, 2012) could not replicate the exact original (American) structure although there were some similarities.

CFA was also used in the current study as an additional procedure to examine both the original model and the new model which resulted from the EFA. The findings revealed very similar results regarding item loadings to their respective factors and fit indices values in both models. All fit indices were acceptable and item loadings were above 0.35. However, the researcher in the current study decided to adapt the original BAPS (Ægisdottir & Gerstein, 2009) as supported by the CFA analysis. The major reason behind choosing the original model was that the new model, resulting from EFA, did not yield a clear item distribution. The factors resulting from the new structure were misleading and not understandable as they were referred to in the EFA results. Also, other psychometric properties of the original model indicated good results. Cronbach's alpha showed very good values: 0.84 for 'intent', 0.71 for 'stigma tolerance', and 0.77 for 'expertness'. Test-retest results were also acceptable: 0.80 for 'intent', 0.56 for 'stigma tolerance', and 0.62 for 'expertness'. Furthermore, corrected Item-total correlations ranged between 0.51 to 0.73 for 'intent', 0.34 to 0.45 for 'stigma tolerance', and 0.49 to 0.64 for 'expertness'. All these properties were better than the properties of the new structure resulting from the EFA.

Taking the above into account, the current study suggests that Omani university students' beliefs towards psychological services can be grouped into three main factors: intent, stigma tolerance and expertness. Also, the researcher recommends the use of the current version of BAPS and suggests further examination of its factorial structure in a larger sample including different age groups.

In addition, the current study explored the known-group validity of the BAPS. Differences in the levels of students' beliefs about psychological services were examined based on two criteria – gender and previous experience with counselling services. Similar to earlier studies, the current Arabic version of BAPS was able to distinguish between these two groups. Female students showed higher levels of 'stigma tolerance' compared to male students, which is supported in the literature (e.g., Ægisdottir & Gerstein, 2009; Makenzie et al., 2004). However, no differences were found in 'intent' and 'expertness' based on gender which was also in agreement with other studies (e.g., Figueroa et al., 2020). Unlike the current findings, some studies found gender differences in 'intent' (e.g., Ægisdottir & Gerstein, 2009; Aegisdottir & Einarsdóttir, 2012; Figueroa et al., 2020; Makenzie et al., 2004) in favor of females; and some studies found no gender differences in 'stigma tolerance' (e.g., Aegisdottir & Einarsdóttir, 2012; Figueroa et al., 2020). Differences based on gender are mainly attributed to the cultural factors that typically vary between cultures.

Moreover, in line with many studies (e.g., Ægisdottir & Gerstein, 2009; Çebi & Demir, 2020; Chen & Chandrasekara, 2016; Fischer & turner, 1970; Makenzie et al., 2004; Rayan & Jaradat, 2016; Topkaya, 2021; Walter et al., 2012), the Arabic version of BAPS found that females had higher levels of positive beliefs, as a total score, towards psychological services.

Regarding differences based on previous experience with counseling, the BAPS was able to distinguish between different groups with experience of three main types of counseling programs (i.e., individual counseling, group counseling, and guidance programs). This division was made due to the fact that each type of program is expected to leave different impacts on students' beliefs towards counseling. It is worth noting, however, that none of the previous studies examined the differences in individual beliefs towards counseling services based on this division and their focus was only on individual counseling.

In agreement with the previous findings (e.g., Ægisdottir & Gerstein, 2009; Çebi & Demir, 2020; Fischer & Turner, 1970; Topkaya, 2021; Walter et

al., 2012), the Arabic version of BAPS was able to differentiate between those who already had past experience in individual counseling and those who did not based on the total score of the scale. Students with past individual counseling experience demonstrated higher positive beliefs towards counseling services. However, no differences were found based on previous experience with other types of programs (i.e., group counseling and guidance programs).

In terms of specific factors, the current findings mirror findings by Aegisdottir and Einarsdóttir (2012) and Makenzie et al. (2004), which revealed that students with past experience with individual counseling had higher levels of 'intent' and 'stigma tolerance' compared to students who did not have experience with individual counseling. However, there was no differences found in 'expertness'.

It is important to note that unlike group counseling and guidance programs, the students in individual counseling services have face-to-face interaction with a counselor, which gives them the opportunity to discuss their problems directly with the counselors. Hence, individual counseling is expected to leave a more noticeable impact on the students. It is perhaps unsurprising to find that the BAPS scale was able to distinguish between the students who had previous counseling experience and those who did not only in the individual counseling program; a finding that is in line with all early mentioned studies as far as the researcher is aware. Therefore, it is recommended that counseling centers generally give more attention to the development and enhancement of individual counseling services. Attempting to offer all students who need counseling individual sessions will hopefully foster their positive beliefs about psychological services.

In conclusion, the Arabic version of the BAPS has the same factorial structure as the original version (Ægisdottir & Gerstein, 2009), as supported by the CFA, with the three main factors: intent, stigma tolerance, and expertness; and exhibits very good psychometric properties. The researcher recommends the use of the current version to measure individuals' beliefs towards counselling. Despite the fact that the current study showed acceptable fit indices based on the CFA, it is necessary to conduct extra studies to examine whether it is possible to get better fit indices. It is crucial that further studies examine the factorial structure of the Arabic version of the BAPS in different samples, such as different age groups and different Arab countries. Also, it is necessary to include a larger sample size in future stud-

ies and examine other psychometric properties, for instance, convergent validity with other relative constructs and divergent validity with unrelated constructs.

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