

Translation, Cross-cultural Adaptation and Validation of the Malay Version of the Maslach Burnout Inventory (MBI) in Malaysia

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Abstract

The Maslach Burnout Inventory (MBI) has been widely used in research for more than 2 decades and is recognized as the leading measure of burnout. Malaysia is a multi-ethnic country and English is regarded as the second language. Therefore, it is essential to have a culturally acceptable translated Malay version of MBI, which can easily be understood by Malaysians, in order to study the burnout level in our population. Hence, the objectives of this study are to translate, cross-culturally adapt and validate specifically the Malay versions of the Maslach Burnout Inventory – Health Services Survey (MBI-HSS), Maslach Burnout Inventory – Educators Survey (MBI-ES) and Maslach Burnout Inventory – General Survey (MBI-GS) in Malaysia. Intraclass correlation was used to examine the test-retest reliability of the Malay versions of the MBI-HSS, MBI-ES and MBI-GS, while Cronbach's alpha was used to assess the internal consistency of the subscales and the instruments as a whole. Exploratory factor analysis involving the principle component analysis extraction and varimax rotation were used to investigate the construct validity of the instruments. Overall, high intraclass correlation and Cronbach's alpha values were achieved in the Malay versions of the MBI-HSS, MBI-ES and MBI-GS. The eigenvalue in factor analysis revealed all items in the Malay versions of the MBI-HSS, MBI-ES and MBI-GS can be grouped into 3 components, which were very similar to the original English versions. In conclusion, the findings from this study had demonstrated the Malay versions of the MBI-HSS, MBI-ES and MBI-GS were valid and appropriate to be used in Malaysia.

Keywords: Maslach Burnout Inventory; Malaysia; psychometric properties; reliability validity

1. Introduction

Burnout can be described as the smothering of a fire. This implies that the fire cannot continue to burn brightly unless the resources are replenished. The concept of "burnout" first emerged in 1970s in the United States and it was designated as a progressive emotional depletion, feeling unsuccessful and being worn out (Freudenberger, 1974). Burnout can also be defined as a gradual loss of idealism, energy and purpose (Edelwich & Brodsky, 1980). Later, "burnout" was defined as a state of exhaustion from physical, mental and emotional aspects (Pines & Aronson, 1981), or a coping mechanism to manage with stressful and demanding working conditions without recognition (Sarros & Densten, 1989). The effects of burnout are detrimental, which can ultimately threaten one's job satisfaction, relationships and health (Maslach, 2003a). Lin (2003) claimed that various factors such as job demands, including workload and workplace stress, were the direct cause of emotional exhaustion and depersonalization.

Over the past 35 years, the concept of burnout was used extensively in the United States and later spread into many countries. This phenomenon creates a notable global significance. For example, a study conducted in 1997 revealed the burnout levels for nurses in both United States and the Philippine were influenced by social work environment (Turnipseed & Turnipseed, 1997). In another study, it was discovered that burnout was prevalent in Jewish and Arab Israelis (Pines, 2003). The concept of burnout was later introduced in Western Europe in the 1980s. From the mid-1990s onwards, the concept of burnout was studied in Eastern Europe, Asia, Middle East, Latin America, Australia and New Zealand (Schaufeli, Leiter & Maslach, 2009). Kulkarni (2006) in his recent study suggested that burnout issues in the

developing countries can be greatly influenced by globalization and privatization. This presumably due to with an increased demands of learning new skills and knowledge, society needs to adopt new technology, the pressure to increase productivity and also time pressure.

Despite the fact that “burnout” was studied globally, the definition of burnout varied across languages in many countries, and “burnout” was perceived differently depending on the local social context. For instances, countries like Sweden and the Netherlands recognized burnout as a medical diagnosis where medical consultation and compensation of treatment were possible (Schaufeli et al., 2009).

It is important for organizations to realize that the working environment could potentially be a contributor to the mental ill health and well-being of an employee. This is mainly because mental ill health has been reported as the second highest work related illness after musculoskeletal disorder (Glozier, 2002). Interestingly, burnout is not a recognized disorder in the Diagnostic and Statistical Manual of Mental Disorder (DSM), which is the common language and standard criteria for the classification of mental disorders published by the American Psychiatric Association (Kraft, 2006). On the other hand, burnout is a recognized disorder in the International Statistical Classification of Diseases and Related Health Problems (ICD-10), which is a coding of diseases and signs, symptoms, abnormal findings, complaints, social circumstances and external causes of injury or diseases, as classified by the World Health Organization (WHO) (ICD-10, 1994).

Recently, many organizations in Malaysia have started to place more prominence on the workplace conditions that could possibly improve job satisfaction and also reduce burnout among employees. The basic reason for this initiative is the perception of global shifts in the internal structures and employment practices in the international organizations (Noordin et. al, 2013). On the other hand, cultural differences and the competitive nature in the labor force in Malaysia are potential factors that could burden the employees. Unfortunately, there is no unified definition related to job satisfaction and burnout in Malaysian context, in which most knowledge was originated from individual experiences, opinions of scholars and corridor conversations (Noordin et. al, 2013).

Malaysia’s aim is to emerge as a developed nation by 2020. This scenario leads to an increase in the labor force competitiveness level which can undoubtedly direct to more burnout cases. Therefore, it is vital to have instruments in the national language of Malaysia (Bahasa Malaysia), which can help to screen and measure the burnout levels. Hence, this study aims at translating, cross culturally adapting and validating the Malay versions of the Maslach Burnout Inventory – Health Services Survey (MBI-HSS), Maslach Burnout Inventory – Educators Survey (MBI-ES) and Maslach Burnout Inventory – General Survey (MBI-GS) using a larger sample. Specifically, this study consists of 2 parts; Part I with an objective to translate and cross-culturally adapt the Malay versions of the MBI-HSS, MBI-ES and MBI-GS, while Part II was to validate the Malay versions of the MBI-HSS, MBI-ES and MBI-GS. The pilot study of these instruments revealed acceptable psychometric properties (Chen et al., 2014).

Study Materials

Maslach Burnout Inventory (MBI)

Although the concept of burnout aroused a huge interests in the early years, however, only limited information was available in guiding the empirical research. A group of researchers took the initiatives to develop and establish a standardized measurement of an individual’s experience of burnout. Today, the Maslach Burnout Inventory (MBI) has been broadly acknowledged as the leading measure of burnout. Generally, the MBI addresses three subscales; 1) emotional exhaustion which measures feelings of being emotionally overextended and exhausted due to work, 2) depersonalization which measures the unfeeling and impersonal response towards one’s service and care treatment, and 3) personal accomplishment which measures one’s successful achievement and competency at work. This instrument was further been enhanced to measure the perception of burnout from three defined groups on their job as well as the people whom they closely interact with. These instruments are known as MBI – Human Services Survey (MBI-HSS), MBI – Educators Survey (MBI-ES), and MBI – General Survey (MBI-GS). All the items in these instruments were scored on a seven-point Likert scale from 0 (never) to 6 (everyday) (Leiter & Maslach, 2005a; Leiter & Maslach, 2005b; Maslach, 2003b; Maslach, Jackson & Leiter, 1996; Maslach & Leiter, 1997; Maslach & Leiter, 2008; Maslach et al., 2009).

Maslach Burnout Inventory – Human Services Survey (MBI-HSS)

Human services professionals, such as counselors or nurses spend considerable amount of time interacting with others. The face-to-face staff-client interaction focuses on the client’s psychological, social or physical problems. The staffs who continuously deal with client’s anger, frustrating or embarrassing emotions may find their experience draining and exhausting, which can eventually lead to burnout. Therefore, MBI-HSS was created specifically to measure burnout as an occupational issue for people who have direct interactions with clients. MBI-HSS consists of 22 items from 3 subscales, namely 1) emotional exhaustion, 2) personal accomplishment and 3) depersonalization (Maslach et al., 1996).

Maslach Burnout Inventory – Educators Survey (MBI-ES)

Teaching professionals are always been subjected to higher pressure by community to expand their roles beyond

educations. Since teachers are usually the first point of contact for students, therefore, teachers are expected to have frequent interactions or consultations with students, to address students' social problems (such as family problems, relationship issues, addictions to drug, alcohol-related issues) and also to contribute to students' moral and ethical development. All these demanding expectations can gradually lead to a feeling of demotivation towards their jobs and may also cause teachers to leave their teaching profession. MBI-ES was designed as a measurement of burnout among teaching professionals. It has a total of 22 items from 3 subscales, namely 1) emotional exhaustion, 2) personal accomplishment and 3) depersonalization (Maslach et al., 1996).

Maslach Burnout Inventory – General Survey (MBI-GS)

MBI-GS is a modified version of MBI-HSS designed specifically to measure burnout as an occupational issue for professions other than public human services. The MBI-GS measured burnout from the perspective of one's performance at work in general. It comprised 16 items from 3 subscales, namely, 1) professional efficacy, 2) exhaustion and 3) cynicism (Maslach et al., 1996).

2. Methods

Part I: Translation and cross culturally adaptation process

Stage 1: Forward translation process

Permission was obtained from Mind Garden, Inc. to translate the English versions of the MBI-HSS, MBI-ES and MBI-GS into Malay. In the forward translation process, a group of medical experts and 2 independent bilingual professional translators translated the English versions of the MBI-HSS, MBI-ES and MBI-GS into Malay. Each translator provided a written report of the translated draft. These reports were reviewed by the researchers when harmonizing the pre-final Malay version of the instruments.

Stage 2: Backward translation process

The pre-final version of the Malay instruments was then back translated into English by a group of medical experts and 2 independent bilingual professional translators. This is known as the backward translation process. New English version of the instruments was developed by referring to the comments in the written reports provided by the translators. The aim of the backward translation process was to compare each item of the new English version of the instruments with the original English version of MBI.

State 3: Consensus meeting

A consensus meeting involving the translators, medical experts and a multi-disciplinary researcher team was held to review, reconcile and harmonize the Malay version of the instruments (Chen, 2009).

Stage 4: Pre-testing the translated instruments

Three different focus groups, comprised 10 respondents for MBI-HSS, 10 respondents for MBI-ES and 10 respondents for MBI-GS, were recruited to pre-test the Malay versions of the MBI-HSS, MBI-ES and MBI-GS. Each focus group was chaired by a moderator. All respondents in each focus group were asked to answer one instrument in both English and Malay versions and their comments with regard to the clarity of language used were documented accordingly.

Stage 5: Final consensus meeting

A consensus meeting among the multi-disciplinary researcher team was held again to review and discuss the comments documented from the respondents in focus groups. Consensus among the team was reached in revising and finalizing the Malay versions of the MBI-HSS, MBI-ES and MBI-GS.

Part II: Validation process

Sample size justification

It was suggested that a minimum of 5 respondents per item (Gorsuch, 1983) or 10 respondents per item (Everitt, 1975) necessary for any questionnaire. Assuming 10 respondents were required for each item per questionnaire, thus, MBI-HSS and MBI-ES required 220 respondents each while only 190 respondents were required for MBI-GS. Therefore, a total of 630 respondents were required for the validation study.

Selection of respondents

The respondents for MBI-HSS were mainly nurses from Hospital Kuala Lumpur whereas instructors from few private universities located in the area of Klang Valley were selected as the respondents for MBI-ES. All respondents in the MBI-GS were general administrative support staff from both private and public sectors. Generally, all respondents were selected conveniently around the area of Klang Valley during the period of January-August 2013. The selected respondents were at least 21 years old and proficient in Malay language.

Study design and procedure

This was a cross-sectional study. All respondents were asked to sign the informed consent letter prior to the commencement of this study. Each respondent spent approximately 30 minutes to complete a demographic form along with a Malay MBI instrument depending on the respondent's professional background. After a 2-week interval, similar respondents were approached for their response on the same Malay MBI instrument.

Reliability analysis

The test-retest reliability analysis was used to examine the reliability of the Malay versions of the MBI-HSS, MBI-ES and MBI-GS after a 2-week interval (Chen, 2009). This type of reliability was evaluated by an intraclass correlation (ICC), which was computed based on a single rate using the one way analysis of variance (ANOVA) model (Streiner & Norman, 1995). By convention, ICC value of 0.70 was regarded as an acceptable reliability coefficient (Maurice, Staquet & Peter, 1998; Nunnally & Bernstein, 1994). On the other hand, Cronbach's alpha was used to assess the internal consistency of the subscales as well as the instrument as a whole. In practice, Cronbach's alpha of at least 0.70 was desirable (Bland & Altman, 1997; Cronbach, 1951; DeVellis, 2003; Nunnally & Bernstein, 1994).

Validity analysis

Validity analysis was used to ensure the underlying scale measured what it was supposed to measure. Exploratory factor analysis involving the principle component analysis extraction and varimax rotation was used to assess the construct validity of the Malay versions of the MBI-HSS, MBI-ES and MBI-GS (Chen, 2009).

3. Results

Demographic background of respondents

Table 1. Demographic background of respondents

Demographic	Malay MBI-HSS n=220	Malay MBI-ES n=229	Malay MBI-GS n=123
Age in years			
Mean \pm SD	33.1 \pm 9.7	36.7 \pm 8.8	33.1 \pm 7.9
Median (min, max)	30.0 (21, 62)	36.0 (21, 66)	31.0 (22, 61)
Gender (n, %)			
Male	53 (24.1)	71 (31.0)	32 (26.2)
Female	167 (75.9)	158 (69.0)	90 (73.8)
Race (n, %)			
Malay	199 (90.5)	70 (30.7)	59 (48.0)
Chinese	5 (2.3)	112 (49.1)	43 (35.0)
Indian	13 (5.9)	42 (18.4)	18 (14.6)
Others	3 (1.4)	4 (1.8)	3 (2.4)
Marital status (n, %)			
Single	79 (35.9)	74 (32.5)	60 (48.8)
Married	139 (63.2)	146 (64.0)	59 (48.0)
Divorced	0 (0)	7 (3.1)	1 (0.8)
Widowed	2 (0.9)	1 (0.4)	3 (2.4)
Educational (n, %)			
Primary school	1 (0.5)	0 (0)	0 (0)
Secondary school	64 (29.5)	1 (0.4)	4 (3.3)
College/university	148 (68.2)	219 (95.6)	112 (93.3)
None	1 (0.5)	1 (0.4)	2 (1.7)
Others	3 (1.4)	8 (3.5)	2 (1.7)
Income (n, %)			
<RM2000	77 (35.0)	3 (1.4)	24 (21.4)
RM2000-RM4000	122 (55.5)	103 (47.0)	67 (59.8)
RM4000-RM6000	10 (4.5)	85 (38.8)	10 (8.9)
RM6000-RM8000	6 (2.7)	18 (8.2)	7 (6.3)
RM8000-RM10000	2 (0.9)	5 (2.3)	0 (0)
>RM10000	3 (1.4)	5 (2.3)	4 (3.6)
Occupation (n, %)			
Employer	8 (3.7)	2 (0.9)	5 (4.1)
Professional	93 (43.3)	212 (93.8)	39 (32.2)
Technical & semi-professional	20 (9.3)	6 (2.7)	3 (2.5)
Administrative support staff	37 (17.2)	3 (1.3)	59 (48.8)
Sales and services	2 (0.9)	0 (0)	6 (5.0)
Police, army and uniform professionals	7 (3.3)	0 (0)	4 (3.3)
Others	48 (22.3)	3 (1.3)	5 (4.1)

Table 1 revealed the minimum required sample size was achieved for both MBI-HSS and MBI-ES, but a slightly lower size was obtained for MBI-GS due to resources constraint.

For MBI-HSS, the respondents were aged between 21 to 62 years old with a median age of 30 years old. Majority of the respondents in this group were female (75.9%), Malay (90.5%), married (63.2%), had tertiary educational background (68.2%) and working as professionals (43.3%) with monthly income of RM2000 to RM4000.

The respondents in the MBI-ES group were aged between 21 to 66 years old with a median age of 36 years old. This group predominantly comprised female (69.0%), Chinese (49.1%), married (64.0%), had tertiary educational background (95.6%) and working as professionals (93.8%) with monthly income of RM2000 to RM4000.

Among the respondents in the MBI-GS group, the age was ranged from 22 to 61 years old with a median age of 31 years old. Most of the respondents in this group were female (73.8%), Malay (48.0%), single (48.8%), had tertiary educational background (93.3%) and working as administrative support staff (48.8%) with monthly income of RM2000 to RM4000.

Table 2. Intraclass correlation (ICC) and Cronbach's alpha

Type of MBI	Sub-scale	ICC	Cronbach's alpha	Overall Cronbach's alpha
Malay MBI-HSS	Emotional exhaustion (EE)	0.847	0.849	0.803
	Depersonalization (DEP)	0.774	0.773	
	Personal achievement (PA)	0.726	0.732	
Malay MBI-ES	Emotional exhaustion (EE)	0.913	0.917	0.788
	Depersonalization (DEP)	0.780	0.781	
	Personal achievement (PA)	0.788	0.787	
Malay MBI-GS	Exhaustion (EX)	0.797	0.798	0.801
	Cynicism (CY)	0.876	0.875	
	Personal efficiency (PE)	0.876	0.878	

Reliability analysis

For MBI-HSS, both ICC and Cronbach's alpha values were beyond the desirable level. Specifically, the ICC was 0.847, 0.774, and 0.726 for emotional exhaustion, depersonalization and personal achievement subscales respectively. On the other hand, the Cronbach's alpha value was 0.849, 0.773 and 0.732 for emotional exhaustion, depersonalization and personal achievement subscales accordingly. The overall Cronbach's alpha value was 0.803.

In MBI-ES, the ICC was 0.913, 0.780 and 0.788 for emotional exhaustion, depersonalization and personal achievement respectively. In addition, the Cronbach's alpha value was 0.917 for emotional exhaustion, 0.781 for depersonalization and 0.787 for personal achievement subscales. The overall Cronbach's alpha value was 0.788. Both ICC and Cronbach's alpha values were beyond the desirable level.

As for the MBI-GS group, the ICC was found to be 0.797 (exhaustion), 0.876 (cynicism) and 0.876 (personal efficacy) subscales. Analogously, the Cronbach's alpha values were 0.798 for exhaustion, 0.875 for cynicism and 0.878 for personal efficacy subscales. The overall Cronbach's alpha value was 0.801. Both ICC and Cronbach's alpha values were well above the desirable level.

Validity analysis

Generally, the eigenvalue in factor analysis revealed all items in the Malay versions of the MBI-HSS, MBI-ES and MBI-GS can be grouped into 3 subscales (Table 3).

In MBI-HSS, the results showed that 5 items (item 6, 13, 14, 16 and 20) have deviated from the original subscales. All 5 items except item 14 were swapped between the subscales of emotional exhaustion and depersonalization. On the other hand, item 14 was found to swap between the emotional exhaustion and personal achievement subscales.

For MBI-ES, the rotated loading factors value for 3 items, namely items 11, 12 and 22, were higher in the emotional exhaustion subscale instead of their original subscales, namely depersonalization subscale for items 11 and 22 and personal achievement subscale for item 12.

In MBI-GS, both items 8 and 9 deviated from their original subscale, cynicism, to exhaustion subscale.

Table 3. Loading factors from principal component analysis with varimax rotation

Items	Malay MBI-HSS			Malay MBI-ES			Malay MBI-GS		
	Component			Component			Component		
	1 (DP)	2 (PA)	3 (EE)	1 (EE)	2 (PA)	3 (DP)	1 (EX)	2 (PE)	3 (CY)
1			0.691	0.856			0.799		
2			0.765	0.806			0.877		
3			0.746	0.810			0.824		
4		0.550			0.498		0.857		
5	0.671					0.644		0.443	
6	0.600		0.321	0.588			0.857		
7		0.647			0.648			0.787	
8			0.691	0.864			0.690		0.302
9		0.612			0.629		0.694		0.297
10	0.687					0.729		0.760	
11	0.722			0.578		0.552		0.792	
12		0.525		-0.556	0.520			0.819	
13	0.774		0.196	0.543					0.246
14		0.374	0.138	0.391					0.874
15	0.730					0.671			0.738
16	0.709		0.120	0.560				0.789	
17		0.796			0.714				
18		0.784			0.753				
19		0.716			0.600				
20	0.710		0.316	0.679					
21		0.669			0.644				
22	0.449			0.431		0.247			

4. Discussion

The overall findings from this study demonstrated that the Malay versions of the MBI-HSS, MBI-ES and MBI-GS possessed acceptable reliability and validity. By validating these instruments in Malaysia, it shows that the Malay versions are able to measure the burnout levels in our population. We want to encourage more awareness and assessments relevant to burnout to be conducted locally.

Since high value of ICC (>0.80) indicated the effect of measurement error on correlation was minimal (Weir, 2005), therefore, the ICC presented for MBI-HSS (ranging from 0.726 to 0.847) clearly indicated negligible measurement error. On the other hand, all Cronbach's alpha values reported for MBI-HSS were well above the desirable value of 0.700. It was revealed in a recent study that a high value of Cronbach's alpha (>0.900) suggested redundancies and indicated the length of the instrument should be shorten (Tavakol & Dennick, 2011). Therefore, the overall Cronbach's alpha value of 0.803 indicated the length of the MBI-HSS was just appropriate to be used. The Cronbach's alpha values for all subscales reported for MBI-HSS were very similar to those published in the technical manual for MBI (Maslach et al., 1996).

For MBI-HSS, it was interesting to reveal 4 items (items 6, 13, 16 and 20) out of a total of 22 items deviated from the original subscales. Generally, these 4 items were found to have swapped between the depersonalization and emotional exhaustion subscales due to the words used. In item 6, an in-depth investigation showed the original wording of "working with people all day is really a *strain* for me" was in the emotional exhaustion subscale, while the Malay wording carried the meaning of "working with people all day is really *stressful* for me" fell into the depersonalization subscale. Analogously, the English wording of "working with people directly puts too much *stress* on me" in item 16 was translated into "working with people directly puts too much *pressure* on me" in item 16. Although the Malay word of "tekanan (pressure)" was a direct translation of the word "strain" and "stress", these words were perceived differently in the Malaysian context. On the other hand, the original wording for item 13 "I feel *frustrated* by my job" was interpreted differently in the Malay version as "I feel *disappointed* by my job". In Asian culture, it was not common to hear the phrase "I feel like I'm at the end of my rope" as in item 20. Therefore, the direct translation of "I feel like I am unable to withstand it anymore" caused confusions among the respondents. The perception of item 14 "I feel I'm working too hard on my job" was slightly different for Malaysians. It was perceived as a personal achievement of being able to work hard instead of an emotional exhaustion aspect.

In MBI-ES, the ICC value of 0.788 to 0.913 clearly indicated negligible measurement error (Weir, 2005). The overall Cronbach's alpha value of 0.788 showed the length of MBI-ES was just appropriate to be used (Tavakol & Dennick, 2011). The Cronbach's alpha values for all subscales reported in MBI-ES were very similar to those published in the technical manual for MBI (Maslach et al., 1996).

The rotated loading factors for items 11 and 12 in MBI-ES were found to be slightly higher in the emotional exhaustion subscale instead of their original subscales, namely original subscales, depersonalization subscale and personal achievement subscale respectively. The negligible increment in the rotated loading factors will not have enough support to move these items away from their original subscale. On the other hand, it was interesting to note that Malaysians perceived item 22 "I feel students blame me for some of their problems" as emotional exhaustion instead of depersonalization.

The ICC presented in MBI-GS (ranging from 0.797 to 0.876) clearly indicated negligible measurement error (Weir, 2005). The overall Cronbach's alpha value of 0.801 justified the length of MBI-GS was just appropriate to be used (Tavakol & Dennick, 2011). The Cronbach's alpha values for all subscales reported in MBI-GS were very similar to those published in the technical manual for MBI (Maslach et al., 1996).

Two items, specifically items 8 and 9, in MBI-GS were found to be deviated from their original subscale, cynicism, to exhaustion subscale. In-depth analysis revealed Malaysians perceived item 8 "I've become less interested in my work since I started this job" and item 9 "I have become less enthusiastic about my work" as exhaustion instead of cynicism.

It was reported in recent studies that differential items may be attributed to translation errors, but it was also likely due to differences in cultural knowledge and experience (Elis, 1989). Recent study concluded that Japanese people, whom are the members of Eastern culture, were found to be low in self disclosure in both verbal and non-verbal measures (Miyahara, 2000). In general, emotional moderation was expected to be observed for those in the Eastern cultures compared to Western cultures (Niedenthal, et al., 2006, pgs 314-15). In spite of its deficiencies, high ICC and Cronbach's alpha values were achieved in the Malay versions of the MBI-HSS, MBI-ES and MBI-GS. The pilot study of these instruments also revealed acceptable psychometric properties (Chen et al., 2014).

5. Conclusion

In conclusion, this study confirmed that the Malay versions of the MBI-HSS, MBI-ES and MBI-GS have acceptable psychometric properties. They were valid and appropriate to be used to facilitate future studies related to burnout in Malaysia.

Limitations

Some limitations existed in this study. The respondents for this study were recruited from the urban area of Klang Valley due to logistic constraints. Previous studies (Abel & Sewell, 1999; Mackie, 2008) indicated that the burnout level was different for those in the rural and urban areas. Therefore, it would be interesting to compare the findings from this study with those in the rural areas. In near future, studies comprising both rural and urban population can be conducted for better review and comparison.

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