

Adaptation, Translation and Validation of The Warwick-Edinburgh Mental Well-Being Acreda Scale (WEMWBS-ACREDA)

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Abstract: The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) was developed to assess the mental well-being of an individual or population. This study reports the processes of translation, validation and analysis of the reliability of the Malay version of the WEMWBS (WEMWBS-ACREDA). The instrument consists of 20 positively worded items and uses a 5-point Likert scale. The 14 original items in the WEMWBS were maintained and 6 new items measuring spirituality were added. The adaptation, translation and validation processes for the instrument were performed by four experts in counselling and psychology with Malay and English language competency. The experts used face validity and back translation techniques. A pilot test was conducted to determine the reliability of the new translated version of the WEMWBS-ACREDA and involved 51 randomly selected in-patients at the Cure and Care Clinic. The data were analysed using Cronbach's alpha and the result of 0.91 indicated high reliability. These findings indicate that the translated version of the WEMWBS-ACREDA is reliable and appropriately measures the mental well-being of normal individuals involved in drug abuse in a local setting. Moreover, the new translated version of the WEMWBS-ACREDA represents a short and convenient psychological tool. However, further studies are recommended to support the findings of this research.

Key words: WEMWBS • Reliability • Translation • Mental well-being • Spirituality • ACREDA

INTRODUCTION

Mental well-being is one of many crucial aspects within the human self that requires special attention in the treatment and rehabilitation process of drug addiction. There are many psychological tools that can be used to determine the level of mental well-being of an individual or population. One tool is the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS), which was developed to assess the mental well-being of a normal individual or population (Tennant, Hiller, Fishwick, Platt, Joseph, Weich, Parkinson, Secker & Stewart-Brown, [1]).

However, no specific instrument is available to assess mental health status in Malaysia for patients with drug addiction. In this study, we describe the detailed adaptation, translation and validation process for the original WEMWBS into the Malay language for use in Malaysia.

Mental Health: According to the World Health Organization [2], there are 450 million people with mental illness worldwide. The World Health Organization (WHO) considers mental well-being a crucial part of the human self and an individual cannot have good health if they

experience mental illness. The WHO [3] also states that mental health allows individuals to realize their abilities, cope with the normal stresses of life, work productively and fruitfully and make a contribution to their community. The significant factors affecting mental health are socio-economic status, biology and environment.

The World Health Organization [4] defined mental health as the condition of physical perfection, a stable mental state and positive social well-being. Importantly, mental health is not merely determined by the absence of disease; in addition, the concept of mental health or mental well-being is not simply a perfect state that is free of disease or disorder. Thus, mental health also involves other factors such as life satisfaction, self-acceptance and social contribution (Parameshvara, [5]).

In 2005, the Ministry of Health in Malaysia clearly defined 'health' as 'a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity'. This definition elaborates that 'health' is a condition of an individual with no ailments and requires normal physical, mental and social functioning. 'Health' measures functionality and body structure in addition to feelings, values and thoughts. Furthermore, health involves individual interactions with the surroundings and interpersonal relationships [6]. According to Hassan Langgulong [7], mental health refers to the extent an individual manages to adapt internally to various factors and their external surroundings, which include living and non-living things.

The Organisation for Economic Co-operation and Development (OECD) noted in 2011 that it is difficult to define "well-being" because it is an abstract concept that includes many aspects of life. The OECD [8] also concluded that there is no single definition for the meaning of well-being. However, scholars have agreed that well-being can be defined as meeting human needs such as good health and having the ability to achieve goals and feel satisfied with life.

Mental Health and Drug Abuse: Yeap and Low [9] described how advances in development, urbanization and increased lifestyle complexity cause problems associated with social, cultural and economic change. An unhealthy lifestyle and depression cause health issues including mental illness. Rush, Urbanosk, Bassani, Cast, Wild, Strik and Somer [10] reported that patients with a mental illness are twice as likely to have a substance use problem compared to the general population.

Saisan, Smith and Segal [11] noted that in patients with a dual diagnosis, the mental health issue and the drug or alcohol addiction result in symptoms that alter the individual's ability to function, make judgments and interact. Furthermore, the substance abuse problem is exacerbated when the mental health problem is untreated. Thus, when drug abuse increases, mental health problems also increase.

Ibrahim, Samah, Talib and Sabran [12] examined factors that contribute to relapse among drug addicts in Malaysia. The authors found that drug addicts show negative emotional characteristics, experience social depression and suffer from interpersonal relationship conflicts.

A research update conducted by the US National Institute on Drug Abuse (NIDA, [13]) focused on mental illness, addiction and comorbidities and the results showed that drug abuse can cause mental illness and that mental illness can cause drug abuse. As a result, mental illness and drug abuse share common risk factors. Nora [14], noted that drug addiction is a mental illness that causes compulsive and uncontrollable drug cravings and changes of behaviour due to changes in brain structure and function. The effect on the brain is similar to other mental illnesses such as depression, anxiety and schizophrenia because several areas of the brain are disrupted. This survey evaluated the correlation between mental illness and drug addiction.

There are currently 12 Cure and Care 1 Malaysia Clinics (C&C1M) in Malaysia. The National Anti-Drug Agency (NADA) [15] reported that there were 23, 688 clients who had participated in C&C1M treatment programs by 2012. In 2013, there were 1, 500 clients who completed the program; together, these reports suggest that the total number of C&C1M clients is large. However, there are currently no studies evaluating the number of participants who have succeeded or failed after completing the treatment program in C&C1M with respect to mental and spiritual well-being. Additionally, there is no specific psychological instrument that can be used to measure mental and spiritual well-being among drug addicts in Malaysia. Mental and spiritual well-being are both very important elements and the WHO [16] indicated that both clients and treatment practitioners have realised the importance of values, faith, hope, sympathy and empathy towards clients during the treatment and rehabilitation process.

Measuring Mental Health: The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): The WEMWBS

was developed by the National Health Service (NHS) in 2005 to measure and assess the mental well-being of individuals. The scale consists of 14 positive items (Table 1) and uses a 5-point Likert scale. The responses for this instrument range from ‘all of the time’ to ‘none of the time’. The minimum score for this scale is 20 and the maximum score is 100. A higher score reflects a high level of mental health well-being. Tennant, Fishwick, Platt, Joseph and Stewart-Brown [17, 1] previously used the WEMWBS to measure both the hedonic and eudemonic perspectives of mental well-being and provided information on positive affects (cheerfulness, optimism and relaxation), satisfying interpersonal relationships and positive functioning (personal development, competence, autonomy, self-acceptance, clear thinking, energy).

Moreover, this instrument has been validated and shows a high reliability value of 0.91. Piaw [18] reported correlation values ranging from 0.75 to 0.95, indicating satisfactory reliability. A test-retest was also conducted and showed a value of 0.83, indicating high reliability.

In this study, we adapted, translated and validated the WEMWBS from its original English version to the Malay language version termed WEMWBS-ACREDA (Asian Centre for Research on Drug Abuse).

Wemwbs –Acreda (Adapted)

The Development of the Spiritual Items And adaptation

Process: Spirituality refers to a subjective experience that includes a personal connection to the power of almighty God. From the Islamic perspective, spirituality means submission and unconditional dependency to Allah’s power. It also signifies an individual’s effort to elevate his spirituality potential to feel the existence and closeness of God (Sussman, Nezami & Mishra, [19]).

Table 1: WEMWBS (Original Version)

No.	Items
1	I've been feeling optimistic about the future
2	I've been feeling useful
3	I've been feeling relaxed
4	I've been feeling interested in other people
5	I've had energy to spare
6	I've been dealing with problems well
7	I've been thinking clearly
8	I've been feeling good about myself
9	I've been feeling close to other people
10	I've been feeling confident
11	I've been able to make up my own mind about things
12	I've been feeling loved
13	I've been interested in new things
14	I've been feeling cheerful

Hamjah [20] stated that an explanation given by Imam al-Ghazali regarding al-Nafsiyy is based on the al-Mawardi dictionary and refers to both spiritual and mental factors. Al-Ghazali also explained that whenever discussing spirituality and religiousness, it is important to include the following inter-related elements: al-Nafs, al-Qalb, al-Ruh and al-'Aqal. Al-Ghazali also mentioned that humans need guidance in seeking goodness.

Khalid [21] associated spirituality with religiosity. For example, listening to music can cause an individual to feel satisfied and peaceful. He also viewed spirituality as religion or things related to religion or religious occasions. Wills, Gibbons, Gerrard, Murry and Brody [22], researchers at Albert Einstein College, used the WEMWBS to determine the importance of religion in an individual. This research was conducted with 1, 182 children in New York. The results showed that religion can help prevent children from smoking, drinking alcohol and abusing drugs and that religion helps children control themselves and their stress.

Psychiatrists believe that religion and spirituality are crucial in individuals’ lives. Indeed, the importance of religion and spirituality are well accepted. Turbott [1] reported that combining both elements of spirituality and psychiatry in treatment and rehabilitation is important and can produce effective results. Verghese [23] reported that the language of religion is important for the aetiology, diagnosis, treatment and prognosis of psychiatric disorders. Interpersonal relationships may be interrupted and psychiatric disorders can develop if spirituality is absent. One of the symptoms of depression is the absence of the will to participate in any activity. However, extreme behaviours and showing disorders related to the practice of religion are symptoms of schizophrenia.

While adapting the WEMWBS, we determined that the addition of spiritual or religious elements was crucial. There are 6 items in the WEMWBS-CREDA (ADAPTED) focused on spiritual aspects. Attaining well-being in general and specifically mental well-being, is connected with the beliefs of Islam. Therefore, the religious items were formulated from the main principle of Islamic belief and spirituality and can be considered a major domain of the revised instrument. Items 1, 4, 5 and 6 were formulated based on the submission of oneself to God. Being submissive to God involves remembrance in the heart of God’s presence and remembrance indicates recollection of God and recognition and acknowledgement of His Lordship (Attas, [24]). This notion is a combination of knowledge and consciousness associated with feeling the presence and nearness of God.

Table 2: Spiritual Items

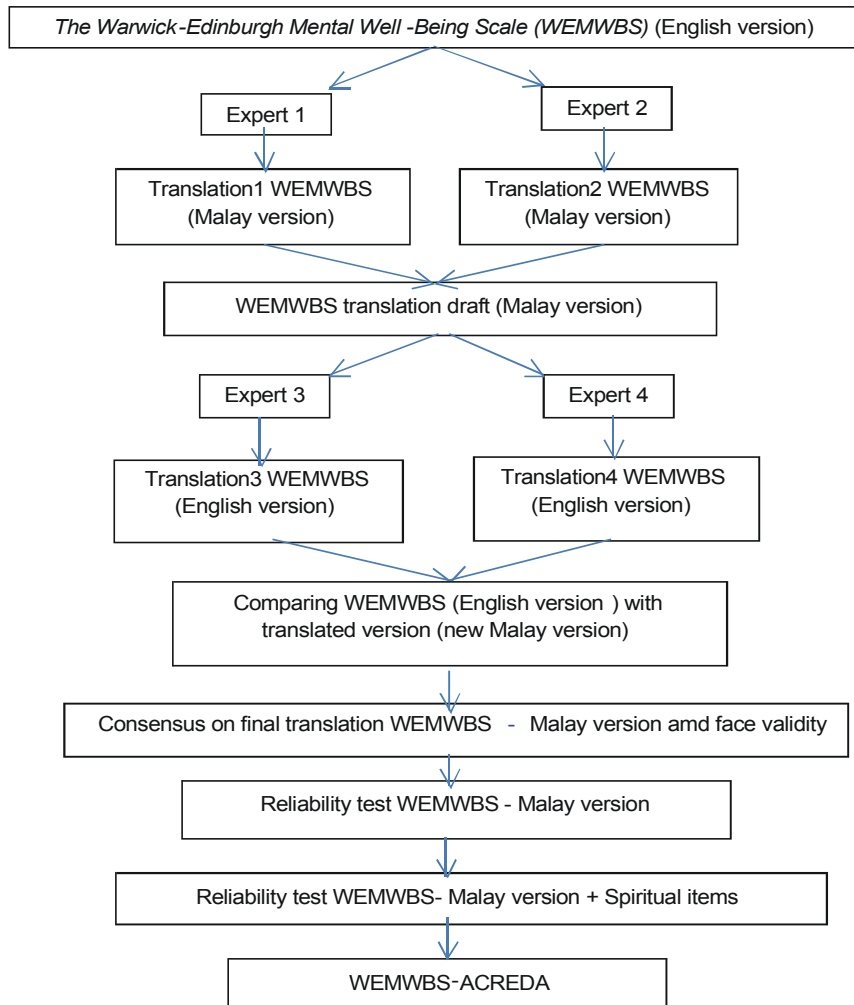
No.	Items	Mean (SD)
1	I think God is the best helper.	4.67 (0.55)
2	I have strength to hinder wrong deeds.	3.88 (0.89)
3	I feel easy to perform prayers.	4.12 (0.77)
4	I believe my problems could be solved easily if I am close to God.	4.51 (0.61)
5	I think I am being guided by God.	4.41 (0.64)
6	I think I am blessed by God.	4.49 (0.73)

With this spiritual opportunity, one can establish a great connection to God that can enhance his/her expectation of God's blessing, guidance, grace and help (Harris, [25]). A person close to God will seek God's help by practicing prayer or doa, as highlighted in item number 3. Consequently, this consciousness will encourage good

deeds and prevent wrong actions as stressed in item number 2. The formulation and construction of these items were based on the concept of submission to God and its impacts on human thinking, emotions and action. Thus, the mental well-being of a person can be directly and indirectly measured or indicated from these items in the Islamic perspective. Table 2 shows a list of the 6 items added to the original 14 items in the assessment tool.

Translation Process and Procedure: The WEMWBS-ACREDA was translated from English language to the Malay language. The figure below shows the translation process of the WEMWBS-ACREDA based on the translation model of Brislin [26].

Translation Procedure for the WEMWBS-ACREDA



Cross-cultural adaptation was involved in translating the psychological material due to different cultural backgrounds and the meaning of each item in the scale.

The experts in the field of counselling established the face validity of the WEMWBS-ACREDA in this study. The experts translated the English version to the Malay language. Then, another group of experts back-translated the Malay version to English to determine whether the translation was accurate. Face validity was established to evaluate whether the instrument assesses the desired qualities and whether the criterion represented a subject that was judged and reviewed by one or more experts. Del Greco, Walop and McCarthy [27] reported that face validity focuses on the appearance of the questionnaire and whether it is constructed carelessly and poorly. The authors also noted that a professional-looking questionnaire is likely to lead to serious responses. It is important to consider face validity during both the pre-test and the post-test. In fact, Kidder stated that face validity is the simplest assessment of validity that does not use any statistical techniques.

Behling and Law [28] stated that back-translation is a well-known method for maintaining the meaning of the original version. The most widely used back-translation method is based on Brislin's classic back-translation model used for instrument validation. Brislin also recommended that a team of translators conduct the translation and back-translation process. This concept is supported by Maneesriwongul and Dixon [29], who reported that back-translation, helps to achieve conceptual equivalence, maintain instrument strength and enhances the credibility.

After performing the back-translation process and face validity evaluation, we evaluated the reliability of the new WEMWBS-ACREDA, which includes 6 new spiritual items. The results for the WEMWBS-ACREDA (Malay version) are described in the results and discussion section.

Test of Reliability: Reliability assesses whether the scale will produce the same reading each time the scale is used on the same type of subject in the same condition (place). Wuensch [30] reported that if a measuring instrument is reliable, then the results show a positive correlation with the true score. Thus, if we measure an event or an object more than once, we will obtain the same score and measures.

The test of reliability for the WEMWBS-ACREDA (ADAPTED) was conducted at the Sungai Besi Cure and Care Malaysia Clinic in Kuala Lumpur and the examination included 51 in-patients. The participants were all male and were from various states around Malaysia. The age range was 15 to 60 years old (26-36 years old

39.2%, 15-25 years old 35.3% and 48-58 years old) and the majority of participants were Malays (96%).

The researchers distributed the WEBWM-ACREDA scales to all respondents. The respondents were informed that there were no right or wrong answers and their participation was voluntary. The respondents answered the scale, which required approximately 45 minutes to complete. The completed scale was then collected for analysis.

RESULT AND DISCUSSION

Reliability of The Scale

WEMWBS-ACREDA: The reliability test was conducted using Cronbach's alpha of the new translated version of the WEMWBS-ACREDA. The value obtained was 0.94, which indicated high reliability. The reliability test further revealed that the 6 new items of spirituality showed a high Cronbach's alpha value of 0.85. The table below shows the list of the items.

The new reliability of the WEMWBS-ACREDA was 0.94, indicating that the tool was highly reliable. The instrument was validated by four experts in counselling and psychology with both English and Malay language proficiency.

Findings: The adaptation, translation and validation processes for the instrument were performed by four experts in counselling and psychology with both Malay and English language competency. The experts used face validity and back-to-back translation techniques. The WEMWBS-ACREDA scale showed a high reliability value of 0.94. The result of the new version of the WEMWBS scale was similar to that of the original version (0.91). These results show that the translated version of the WEMWBS-ACREDA is reliable and appropriate to measure mental well-being of normal individuals with drug abuse. Moreover, this revised scale represents a short and convenient psychological tool for practitioners in Malaysia.

Direction for Future Research: One limitation of this study was the low number of participants involved; only 51 individuals were evaluated, which is less than that for the original version (2,075 individuals). Radhakrishna [31] reported that the reliability of a pilot test could be established by collecting data from 20-30 subjects not included in the sample. Moreover, our research study only involved male participants because the in-patient rehabilitation centre is only for male patients.

Table 3: Reliability Test of the WEMWBS-ACREDA

Constructs	Item Numbers	Total Cronbach's Alpha Value
Mental Well-Being (Original Version) –	14	0.91
SpiritualityItems	6	0.85
Total WEMWBS-ACREDA (Mental Well-Being and Spiritual)	20	0.94

However, these limitations of the current research could serve as a guide for future studies. For instance, future studies could evaluate the following: (1) the development of a mental health and spiritual scale that focuses on female subjects, (2) the development of a mental health and spiritual scale that focuses on different age populations (adolescents, adult and children) and (3) the comparison of mental and spiritual health among drug-abusing adolescents.

CONCLUSION

There are no specific instruments available to measure mental well-being and spiritual health in drug addicts in Malaysia. Additionally, spiritual awareness among Malaysians is important. Thus, the purpose of the current study was to develop an instrument to measure mental health and well-being in drug addicts in Malaysia. In particular, the revised scale described herein consists of spiritual elements to assess drug addicts in terms of their mental well-being and spirituality. The findings of this study show that the new scale (WEMWBS-ACREDA) is reliable and can be used by practitioners/counsellors from NADA and other non-governmental organizations (NGOs) to aid drug addicts with their addictions.

This new translated version of the WEMWBS-ACREDA is a valid, highly reliable and locally appropriate instrument that can be used in Malaysia to measure and assess the mental well-being and spirituality of normal individuals with a drug abuse problem. Furthermore, this tool is easy to use and does not require a substantial amount of time. While the instrument has proven to have excellent psychometric values, further validity and reliability studies are necessary to support the finding of this initial study. In particular, more diverse patient samples are needed and it is recommended that future studies use more sophisticated statistical analyses.

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