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Adaptation and Validation of the Mental Health Continuum Long Form (MHC-LF) in Indonesia: A Psychometric Analysis

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Original Article

Adaptation and Validation of the Mental Health Continuum Long Form (MHC-LF) in Indonesia: A Psychometric Analysis

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Abstract. The study aims to adapt and validate the MHC-LF in Indonesia. The sample used was 315 participants, 29 from the client group and 286 from the general group. Psychometric property analysis was carried out, including item analysis, reliability estimation using test-retest and internal consistency, and collecting validity evidence based on test content, internal structure, and relationships with other variables. The results showed that psychological well-being item number 10 and social well-being number 3 had insignificant loading factor values. MHC-LF reliability is high, with r= 0.85-0.94. This shows that the score produced by the MHC-LF is stable over time, and the items that compose it have internal consistency and are unidimensional. The expert panel judgment provides evidence that all MHC-LF items are relevant to measured aspects. Confirmatory factor analyses confirmed the three-factor model of emotional, psychological, and social well-being. MHC-LF is positively correlated with WEMWBS and negatively correlated with BDI-II. The difference in the mean scores of each subscale and the total significantly differed between the general and client groups. The validity evidence proves that the MHC-LF is a measuring tool that measures subjective well-being. The systematic judgmental scale provides evidence that the measurement tool for the translation results is equivalent to the original version.

Keywords: MHC-LF; Adaptation; Validation; Subjective Well-being; Mental Health

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Introduction

Mental health is a health problem that is of concern in Indonesia. According to the World Health Organization (WHO), mental health is "a state of well-being in which the individual realizes his abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can make a contribution to his community" (Galderisi et al., 2015). Meanwhile, according to Law Number 18 of 2014, Mental Health is "a condition in which an individual can develop physically, mentally, spiritually and socially so that the individual is aware of his abilities, can cope with pressure, can work productively, and can contribute to his community." (Undang-Undang Nomor 18 Tahun 2014 Tentang Kesehatan Jiwa, 2014). From the two definitions presented, it can be concluded that mentally healthy people can realize their abilities, cope with life's pressures, be productive and valuable, and contribute to their community.

Indonesia, as a developing country, cannot be separated from mental health issues among its people. One of the mental health issues in Indonesia is the growing number of cases of mental disorders experienced by Indonesian people. Factors that increase the risk of developing mental disorders in Indonesia are poverty, low education or mental health literacy,

parenting patterns, violence against children at home, violence between teenagers, and bullying at school (Wulandari, 2021). According to the Director of Prevention and Control of Mental Health and Drug Problems, 20 percent of the population in Indonesia, or one in five Indonesians, has the potential for mental disorders (Pramudiarja, 2021). Another problem faced is the limited service facilities and professional human resources for mental health workers. Apart from that, negative stigma is often directed at people with mental disorders.

Negative stigma from society can take the form of direct discrimination that looks frontal and harsh, such as cruel treatment or insulting words, and subtle discrimination, such as the silent or unintentional exclusion of people with mental disorders (Silvana, 2020). Discrimination that is often encountered in Indonesia is the shackling of people with mental illnesses. Mental health in Indonesia is often linked to a person's faith and beliefs; many people believe that people who experience mental disorders are due to a lack of gratitude (Sakina, 2021). Apart from that, Indonesian people also consider people with mental illnesses to be dangerous people, and their treatment cannot be equated with that of ordinary people (Dzilhaq, 2020). There are still many other negative stigmas aimed at people with mental disorders. Disturbed mental health combined with discrimination from the environment can be a burden that people must bear with mental illnesses. Mental health problems in Indonesia must be handled appropriately by various parties through prevention and management.

Mental health is usually considered a condition free from mental illness, but the absence of mental illness does not mean that a person can be mentally healthy. The complete state model of mental health considers mental health and mental illness as two separate continuums (Magyar-Moe, 2009). In this approach, the absence of mental illness is not the same as the presence of mental health (Magyar & Keyes, 2019). Mental health is assessed through the degree of symptoms of mental illness and the degree of well-being experienced by a person (Magyar-Moe, 2009). According to Keyes (2005), mental health and mental illness are correlated unipolar dimensions that together form a complete state of mental health.

The positive psychology research paradigm began to develop in the last decades of the 20th century to focus on making individuals' lives more productive and fulfilling and identifying and nurturing individual talents rather than treating mental illness. (Magyar-Moe, 2009). (Keyes, 2005) states that mental health is a complete state in which individuals are free from psychopathology and flourishing with high emotional, psychological, and social well-being levels. Keyes' definition explains that mental health is insufficient to be free from psychopathology, but individuals must develop positively. These developments lead to conditions of subjective well-being, including feeling positive emotions and functioning positively both psychologically and socially.

Two perspectives often used in understanding well-being are hedonic and eudemonic well-being (Keyes, 2005; Magyar & Keyes, 2019). Eudemonic well-being views well-being as the level of positive feelings experienced and individual perceptions of their lives. Meanwhile, hedonic well-being views well-being as a positive function dimension where a person realizes his human potential. The human potential includes psychological well-being and social well-being. Keyes & Magyar-Moe (2003) states that subjective well-being consists of elements of perceived happiness and life satisfaction, a balance between positive and negative affect. (Diener, 1984), psychological well-being (Ryff, 1989; Ryff & Keyes, 1995), and social well-being (Keyes, 1998). Combining emotional well-being and positive functioning can create a comprehensive subjective well-being model that considers various aspects of the individual and their social function.

Some measuring tools commonly used to measure mental health in Indonesia are The Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) (Rusydi, 2012a), Mental Health Continuum Short Form (MHC-SF) (Winurini, 2019) dan Mental Health Inventory (MHI-38) (Rusydi, 2012a; Aziz, 2015; Aziz & Zamroni, 2020). The WEMWBS and MHC-SF measuring instruments measure positive mental health conditions, while the MHI-38 is a dual

model that measures positive and negative mental health conditions. The measuring instruments that have been mentioned are measuring instruments developed using foreign languages. The researchers carried out an adaptation and modification process from the original language to Indonesian so that it could be used.

Keyes & Magyar-Moe (2003) developed an instrument to measure subjective well-being by combining emotional, psychological, and social scales. The combination of these three measuring instruments forms the MHC-LF. The MHC-LF is a 35-item self-assessment scale that measures subjective well-being. Subjective well-being consists of a combination of positive emotions and positive functioning. Positive emotions refer to emotional well-being, and positive functions refer to psychological and social well-being.

MHC-LF was developed outside Indonesia, namely in the United States. Figueira et al. (2014) previously adapted the measuring instrument in Portuguese. His research results show that the three-dimensional model better fits based on factor analysis. Two divergent and convergent validity studies were conducted using burnout and engagement measures. MHC-LF has good internal consistency reliability for the complete and three scales ($\alpha > 0.80$).

The use of the MHC-LF in Indonesia must undergo an adjustment process so that the measured concept is equivalent to the original measurement tool. The language and culture of the measurement tool's country of origin differs from Indonesia. The adjustment or adaptation process is limited to translation and needs several systematic and standardized stages. Therefore, this study aims to carry out a standardized adaptation process and validate the measuring instrument in Indonesia. Adaptation steps follow the guidelines set by the International Test Commission (2017).

Method

Participants

The number of research participants used in this study was 315 participants. Participants consisted of the mental health center client group and the general group. The client group was obtained from a psychology service bureau. Participants are clients who need or have received counseling or psychotherapy at the bureau. At the same time, the general group was obtained by filling out an online questionnaire through the Google form. The criteria for research subjects are Indonesian citizens aged over 18 years and willing to become research participants.

Materials

This research used three instruments: MHC-LF, The Warwick-Edinburgh Mental Wellbeing Scales (WEMWBS), and Beck Depression Inventory–II (BDI-II). The MHC-LF measurement tool measures three aspects, namely emotional, psychological, and social well-being (Magyar & Keyes, 2019). The scale contains 35 items that can be summed to produce a total well-being score and scores of three subscales (Table 1). The total well-being score is obtained by adding up the 35 items so that the score ranges from 39 to 271. The emotional well-being subscale consists of scores ranging from 6 to 40; the psychological well-being subscale consists of 18 items ranging from 18 to 126; and the social well-being subscale consists of 15 items ranging from 15 to 105. The higher the score, the higher the level of well-being.

The Indonesian version of WEMWBS consists of 14 affirmed items, including eudemonic and hedonic well-being (Wicaksono et al., 2021). WEMWBS was used to gather evidence of the convergent validity of the MHC-LF. The Indonesian version of the BDI-II consists of 21 items used to assess subjective depressive symptoms (Ginting

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et al., 2013). The measures include cognitive (e.g., thoughts about past failures), emotional/affective (e.g., sadness), and somatic/vegetative (e.g., fatigue or tiredness) symptoms. BDI-II was used to gather evidence of the discriminant validity of the MHC-LF.

Table 1. Blueprints of the MHC-LF

No	Subscale	Dimensions	Item		Total
			Unfavorable	Favorable	
1	Emotional Well-Being	Positive Affect		EWB 1 (a,b,c,d,e,f),	1
		Life Satisfaction		EWB 2	1
		Total		**2**	**2**
2	Psychological Well-Being	Self-Acceptance	5	1,2	3
		Purpose in Life	7, 10	3	3
		Environmental Mastery	4	8,9	3
		Positive Relations with Others	6,16	13	3
		Personal Growth	14	11,12	3
		Autonomy	15,	17,18	3
		Total	**8**	**10**	**18**
3	Social well-being	Social Coherence	1,8	12	3
		Social Integration	2	6,11	3
		Social Acceptance	10	3,14	3
		Social Contribution	7,15	4	3
		Social Actualization	9,13	5	3
		Total	**8**	**7**	**15**
	Total				**35**

Adaptation Procedures

The adaptation process follows the guidelines set by the International Test Commission (2017):

Preconditions. Before starting the adaptation process, the researcher sent an email requesting permission from the copyright holder, C. L. M. Keyes, as the developer of MHC-LF. In addition, researchers have also obtained ethical approval from the Ethics Commission of Padjadjaran University to conduct this research. Researchers conduct theoretical studies on the measured constructs to obtain theoretical and empirical evidence. Researchers also examined cultural and language differences before starting the adaptation process and designed the study design to control for potential bias.

Test Development. This study's translation and cultural adaptation process uses the principles of translation and adaptation from Wild et al., 2005. There are ten steps taken in the process of translation and cultural adaptation. First, the preparation, the researcher forms a team of experts to carry out the translation process. Second, two independent translators carry out the forward translation process with a TOEFL ITP score above 500, Indonesian citizens, and psychology master students. Third, reconciliation is carried out against the forward translation results, producing a single forward translation. Another independent translator carries out the fourth, back translation. Fifth, the backward translation results are compared with the original version to highlight and investigate differences between the original items and the reconciled translation. Sixth, harmonization is carried out. Seventh, cognitive debriefing was conducted on five people

(two male students and three female students). Eighth, a review of Cognitive Debriefing Results and Finalization was carried out. Ninth, in proofreading, the researcher checks the final translation and corrects the remaining spelling, diacritics, grammar, or other errors. The last one is making the final report. Examples of final translated items are presented in Table 2.

Table 2. Final translated MHC-LF items

Subscale	No	Original Items	Final Translation
Emotional Well-being	2	Using a scale from 0 to 10 where 0 means "the worst possible life over all" and 10 means "the best possible life overall," how would you rate your life overall these days?	*Menggunakan skala dari 0 sampai 10 di mana 0 berarti "kehidupan yang paling buruk secara keseluruhan" dan 10 berarti "kehidupan yang paling baik secara keseluruhan," bagaimana Anda menilai hidup Anda secara keseluruhan akhir-akhir ini?*
Psychological Well-being	7	I live life one day at a time and don't really think about the future.	*Saya menjalani hidup hari demi hari dan tidak terlalu memikirkan masa depan.*
Social Well-being	9	Society has stopped making progress.	*Masyarakat telah berhenti membuat perkembangan.*

Confirmation. This study used a systematic judgmental scale (Jeanrie & Bertrand, 1999) to collect conceptual and linguistic equivalence evidence between translated and original items. Eight expert panels were asked to evaluate the equivalence between the translated items and the original versions. Three experts work as psychologists, and five other experts are Master of Psychology students. Psychometric Property Analysis is run through item analysis, reliability estimation, and collection of valid evidence. Item analysis by looking at the item-rest correlation value of each item. Estimation of reliability using test-retest, split-half, and Cronbach's alpha methods. Test-retest is carried out by giving the same test to a group of research participants, which is carried out at intervals of one day and one week after the first data collection.

One-day retest intervals are typically used to assess the short-term stability or consistency of the test. This interval helps to measure the extent to which participants' responses remain stable over a short period, where memory and practice effects are more likely to be at play.

It helps evaluate whether the test is reliable over brief periods and whether immediate factors (e.g., fatigue, practice, mood) affect test scores. One-week retest intervals are used to assess the medium-term stability of the test. This interval provides insights into whether the test scores remain consistent over a longer period, beyond the immediate effects. The one-week interval is useful for evaluating the test's reliability when it's intended for use in situations where the measurement should be consistent over a moderate duration. It allows researchers to consider more enduring factors that may affect test scores, such as learning or habituation.

Evidence of validity is obtained based on the test content, internal structure, and relationship with other variables (American Educational Research Association et al., 2014). Ten expert panels were asked to determine the relevance of each test item to the aspects being measured. Three experts are psychology lecturers, three psychologists, and four Masters of Psychology students. The expert panel's assessment results were then calculated using Aiken's V formula with a minimum value of 0.70 (Aiken, 1985). Confirmatory Factor Analysis (CFA) analysis was carried out to see the suitability of the measurement model based on theory through first-order confirmatory factor analysis and second-order confirmatory analysis.

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Two external variables are used to collect convergent and discriminant evidence. The Indonesian version of the WEMWBS (Wicaksono et al., 2021) measures mental well-being and is hypothesized to measure the same construction as the MHC-LF. Furthermore, the Indonesian version of BDI-II (Ginting et al., 2013) measures depressive symptoms, hypothesized to measure constructs different from the MHC-LF. Group membership category variables (general client) are also used as evidence. The general and client group scores were hypothesized to differ significantly. Data analysis was performed using JASP 0.16.4.0 software.

Administration. Test administration in this study was carried out online using a Google form link prepared by the researcher. Administrative materials and instructions adapted to Indonesian culture and language. Administrative procedures and response options are as close to the original version.

Score Scales and Interpretation. Any differences in group scores are interpreted in light of all available relevant information. Scores are only compared across populations when the degree of invariance has been assigned to the scale on which the scores are reported.

Documentation. Researchers documented the technical nature of each change, including reports of evidence obtained to support equity.

Results and Discussion

Results

Demographic data. Demographic data of research participants are presented in Table 3. Based on item analysis, four items have a low item-rest correlation value, namely below 0.19, which are classified as discarded/revised according to Ebel (1965 in Crocker & Algina, 2008). A low item-rest correlation value indicates that the four items are not aligned with the overall function of the scale. The negative correlation value indicates that participants with high well-being scores should not approve of this item but tend to be approved by participants. The contents of the fourth statement are presented in Table 4. Items with negative correlation values are not included in the following analysis process.

Table 3. Demographic Data of Research Participants

	Group		Total	(%)
	General	Client		
Total Participants	286	29	315	100%
Gender				
Man	84	9	93	29.52%
Woman	202	20	222	70.48%
Age				
18-25	174	28	202	64.13%
26-40	103	1	104	33.01%
41-60	9	0	9	2.86%
Education				
High school and below	160	18	178	56.51%
Undergraduate and above	126	11	137	47.49%

Table 4. MHC-LF items with an item discrimination value of ≤0.19

Subscale	No	Statement	r	Mean (SD)
Psychological Well-being	8	*Secara umum, saya merasa saya bertanggung jawab atas situasi di mana saya tinggal. (Item favorabel)*	0.15	5.64 (1.22)
	10	*Terkadang saya merasa seolah-olah saya telah melakukan semua yang harus dilakukan dalam hidup. (Item unfavorabel)*	-0.18	3.30 (1.49)
	18	*Saya menilai diri berdasarkan apa yang menurut saya penting, bukan berdasarkan nilai-nilai yang menurut orang lain penting. (Item favorabel)*	0.18	5.37 (1.33)
Social Well-being	3	*Orang-orang yang melakukan suatu kebaikan tidak mengharapkan imbalan apapun. (Item favorabel)*	0.11	5.40 (1.55)

Reliability. Test results using three reliability estimation methods are presented in Table 5. The test-retest reliability value (2 days) for each subscale ranged from 0.888 to 0.917; the total score was 0.926. This shows that the score resulting from measurements with an interval of 2 days has strong stability. The stability value of the total score is stronger than the score on each subscale. The same thing happened in the test-retest (1 week); the reliability value was substantial, with a subscale score correlation ranging from 0.851 to 0.896 with a total score of 0.902. Reliability estimation using the split-half method produces a reliability value of subscale scores ranging from 0.868 to 0.931 and a total score of 0.943. Estimating reliability using Cronbach's Alpha produces a reliability value of subscale scores ranging from 0.838 to 0.897 and a total score of 0.931. The alpha coefficient is the lower bound of the reliability coefficient, known as the precision coefficient (Crocker & Algina, 2008). A relatively high value indicates that the items in the MHC-LF are unidimensional. Unidimensional means that the performance of the items in the measuring instrument can be explained in a single factor.

Tabel 5. Reliabilitas Alat Ukur MHC-LF

Variabel (N item/subjek)	*Test-retest*		*Split-half* (n=315)	*Alpha Cronbach* (n=315)
	Two days (n=37)	One week (n=32)		
Total MHC-LF	0.926**	0.902**	0.943	0.931
Emotional Well-being	0.917**	0.896**	0.931	0.897
Psychological Well-being	0.900**	0.869**	0.868	0.839
Social Well-being	0.888**	0.851**	0.872	0.838

***Correlation is significant at the 0.01 level (2-tailed).*

Validity. The Aikens V index for each MHC-LF item ranges from 0.775 to 0.975 with a mean (sd)=0.90 (0.05). The Aikens V index value for all items is more than 0.70, indicating that all MHC-LF items are relevant to the measured aspects based on the expert panel's judgment results. Convergent and discriminant evidence for the MHC-LF is presented in Table 6. The scores of each subscale and total MHC-LF correlated

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positively with WEMWBS. The two instruments both measure the positive aspects of mental health (Tennant et al., 2007; Magyar-Moe, 2009). The correlation strength of each MHC-LF subscale with WEMWBS is muscular (Dancey & Reidy, 2017). The correlation of scores for each subscale and total MHC-LF correlated negatively with BDI-II. The two instruments measure mental health constructs in different aspects. MHC-LF measures positive aspects, and BDI-II measures negative aspects (Ginting et al., 2013; Magyar & Keyes, 2019). The correlation strength of each MHC-LF subscale with BDI-II is moderate, while the total score is strong (Dancey & Reidy, 2017). The average distribution of the general group's responses was greater than that of the client group. The general group scores on each subscale; the total is greater than the client group. The results of the differential test using the Mann-Whitney U test showed that the mean differences for each subscale and total were significantly different between the general and client groups (Table 7).

Table 6. MHC-LF Convergent and Discriminant Evidence

Variable (N)	WEMWBS *Convergent Evidence*	BDI-II *Discriminant Evidence*
MHC-LF	0.878**	−0.707**
Emotional Well-being	0.757**	−0.619**
Psychological Well-being	0.810**	−0.651**
Social Well-being	0.797**	−0.621**

***Correlation is significant at the 0.01 level (2-tailed).*

Table 7. Differences in Mean Scores of General and Client Groups

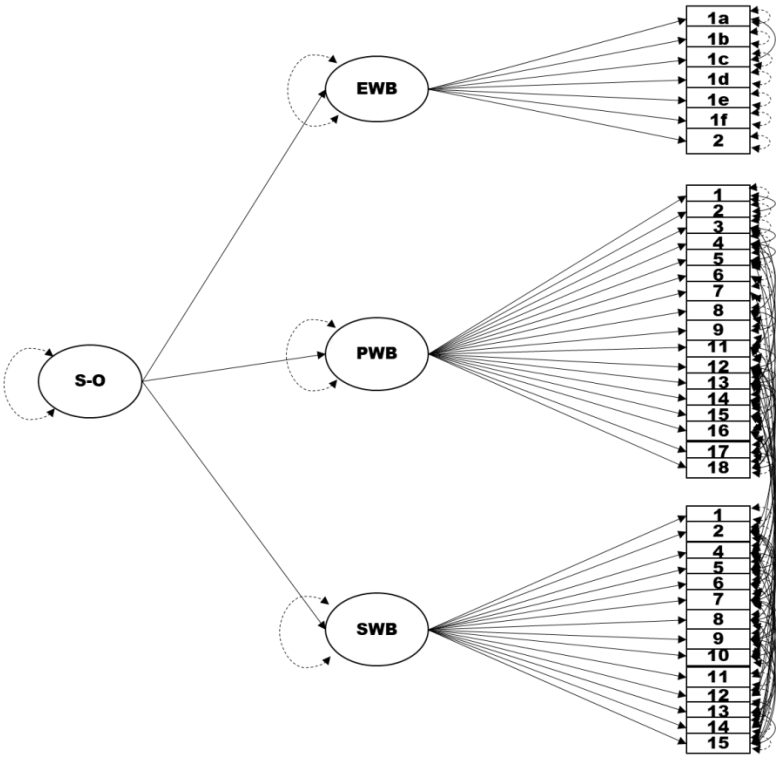
	Client		General		Difference Test	
	M	**SD**	**M**	**SD**	**W**	**p**
Emotional Well-being	20.76	5.08	26.89	6.74	1905.5	< .001
Psychological Well-being	77.66	15.07	88.6	12.29	2435	< .001
Social Well-being	58.14	12.81	68.32	12.68	2380.5	< .001
Total MHC-LF	156.55	30.44	183.81	28.61	2141.5	< .001

The four measurement models of well-being were confirmed through CFA analysis with diagonally weighted least squares (DWLS) (Table 8). A measurement model for the emotional, psychological, and social well-being subscales will be tested through confirmatory first-order factor analysis. Furthermore, through the second-order confirmatory, a measurement model for subjective well-being latent variables will be tested, composed of three factors, namely emotional, psychological, and social well-being. The goodness of fit criterion for concluding that there is a relatively good fit between the hypothesized model and the observed data is the minimum fit function chi-square $p > 0.05$; cutoff values close to 0.95 for TLI, CFI, and RNI; the cutoff value is close to 0.08 for SRMR; and a cutoff value close to 0.06 for RMSEA (Hu & Bentler, 1999). The emotional well-being model was confirmed to be fit without modification. However, the psychological and social well-being models were confirmed to be fit after modifying several measurement errors or unique variances. Likewise, on the total MHC-LF/subjective well-being scale, model modifications were also carried out.

Table 8. The goodness of fit indices MHC-L**F**

Model	Factor	$chi - square$	df	p	CFI	TLI	RMSEA	SRMR	Conclusion
Emotional well-being	1	24.137	14	0.04	0.99	0.99	0.048	0.026	Fit
Psychological well-being	1	197.67	97	<0.001	0.99	0.98	0.057	0.056	Fit
Social well-being	1	113.80	57	<0.001	0.99	0.99	0.056	0.048	Fit
Subjective well-being	3	1729.65	609	<0.001	0.99	0.99	0.059	0.064	Fit

Psychological well-being item number 10 and social well-being number 3 were removed from the analysis because they had insignificant loading factor values. The MHC-LF measurement model in Figure 1 shows that the fit model with one latent variable is measured using three factors, namely emotional well-being (7 items), psychological well-being (17 items), and social well-being (14 items). The fit model is obtained by correlating several measurement errors/unique variances. A cross-loading measurement error has occurred on the MHC-LF. All cross-loading occurs on the psychological well-being and social well-being subscales. This shows that besides functioning to measure subjective well-being, the two scales also measure other unique factors. Conceptually, psychological and social well-being variables are two constructs that measure positive functioning (Magyar & Keyes, 2019; Keyes, 2005). Therefore, cross-loading measurement errors from the psychological and social well-being subscales can occur because both measure unique factors that may be positive functioning.



Sources: Personal data (2023).

Figure 1. Three-factor MHC-LF model after modification

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Equivalence. Through a systematic judgmental scale in terms of content, several words/sentences make it difficult to find equivalent words in Indonesian, such as "full and complete" and "society is not improving for people like me." However, conceptually and linguistically, the items that make up the MHC-LF are equivalent based on the expert panel judgment. There is only one item that is content and linguistically less equivalent. This item is item number 13 of social well-being from the MHC-LF. Regarding content, researchers find it challenging to find appropriate word equivalents, and based on the assessment of the panel of experts, the item is considered less commensurate with the original version.

Discussion

This research aims to adapt MHC-LF to Indonesian. Most MHC-LF items are excellent, with a few good and marginal items and four poor items. A negative correlation means that the item cannot function as intended. The higher the correlation value, the more it can be said that the item has alignment or consistency in the MHC-LF. In addition, the value of item-rest correlation can also be used to see the performance of items to differentiate groups of subjects based on their performance on the measured variable. In other words, the higher the item-rest correlation value of an item, the better the item differentiates groups with low scores from groups with high scores. The correlation value between the item score and the total score can be a parameter that can increase or decrease reliability. The higher the item-rest correlation value for an item, the presence of that item will increase the reliability value. Conversely, if the item-rest correlation value is lower, the item's presence reduces the reliability value; if the item is omitted or not included in the analysis, the reliability will increase.

The results of reliability estimation using the test-retest, split-half, and Cronbach's alpha methods show that the reliability score of each subscale and the total score of the MHC-LF measuring instrument are included in the strong category> 0.70. This shows that the score generated from the MHC-LF measuring tool is stable over time. In addition, the items in the measuring instrument have internal consistency and are unidimensional in measuring a single factor, namely subjective well-being.

The expert panel judgment shows that all MHC-LF items are relevant to measured aspects. Thus, the evidence-based test content shows that the scores obtained from the MHC-LF can be used to measure subjective well-being. The scores for each subscale and the total MHC-LF correlated significantly with the WEMWBS and BDI-II scores positive correlation value with the WEMWBS score and negative with the BDI-II score. The strength of the correlation is moderate to strong (Dancey & Reidy, 2017). Furthermore, the strength of the correlation, which reaches a moderate to strong level, indicates a reasonably strong relationship between these variables. In the context of this research, these findings support the validity of the MHC-LF measurement tool in measuring mental health.This correlation aligns with what is expected, where WEMWBS measures the similiah construction, and BDI-II measures different constructions. This correlation can provide convergent and discriminant evidence for the validity of the MHC-LF.

The second-order confirmatory analysis has confirmed the structure of the three emotional, psychological, and social factors that construct subjective well-being. In addition, through the first-order factor confirmatory, one-factor model has been confirmed for each subscale (emotional, psychological, and social well-being). This study's results align with the findings of Figueira et al. (2014). Through CFA analysis, it was found that the three-factor model was the most appropriate. In addition, the research results align with the underlying theoretical concept that the MHC-LF is structured based

on three scales: emotional well-being, psychological well-being, and social well-being (Keyes & Magyar-Moe, 2003).

Analysis of the distribution of client and general response groups showed consistent mean differences. In the MHC-LF, the mean value of almost all items in the general group is higher than that of the client group. The results of the differential test showed that the mean differences for each subscale and the total MHC-LF differed significantly between the general and client groups. The difference between the client group and the general public can provide evidence based on relation to other variables in the MHC-LF. The systematic judgmental scale conducted by experts provides evidence of equivalent content conceptual and linguistic measuring instruments adapted from the original version.

Further research in a broader sample is suggested to obtain more representative results. In this study, samples from the clinical group were still minimal. Studies with more and more equally representative groups allow comparisons between groups. Samples can be taken from general and clinical groups. The analysis in this study is based on classical test theory. Future research can use modern test theories such as Item Response Theory (IRT). IRT has advantages compared to CTT because it is able to provide more accurate measurements, model individual differences, and produce more in-depth analysis of items in test measurements. Multigroup confirmatory factor analysis can be considered for further research. It is essential for further research because it helps ensure the validity and reliability of measuring tools in various contexts by examining whether the factor structure and item loadings are consistent across groups.

Conclusion

The study results show that the items in the Indonesian version of the MHC-LF can be used to measure subjective well-being. However, two items were deleted in the analysis because they had insignificant loading factors. These items cannot function appropriately in measuring the indicators being measured. The reliability of the MHC-LF measuring instrument is relatively high using the test-retest, split-half, and Alpha Cronbach estimation methods. Evidence based on test content, internal structure, and relations to other variables provides evidence that the MHC-LF measuring instrument is a measuring tool that can measure subjective well-being. The Indonesian version of the MHC-LF is equivalent in content, conceptually and linguistically, to the original version.

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