

Adaptation and Psychometric Analysis of the Workaholism Scale for Workers in Indonesia

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Abstract

The objective of this study was to adapt the workaholism measure instrument and examine the psychometric results to be tested on employees and workers in Indonesia. This measure has been tested and is applicable to workers in various occupational fields in the United States. The workaholism measurement instrument was developed by Clark, Smith, and Haynes (2020) and has never been adapted for the population in Indonesia. The process of adapting this measuring instrument refers to the International Test Commission. The participants in this study were 102 workers in Indonesia using the incidental sampling technique. The adapted scale shows that it is reliable, with a Cronbach's alpha of .931. In the Confirmatory Factor Analysis (CFA) results, the fit model is acceptable (RMSEA = .70, CFI = .96), which indicates that the data are consistent with the research hypothesis. The results of the adaptation of the workaholism scale into Indonesian have a different number of items from the original measuring instrument, namely 13 items. Evidence through confirmatory factor analysis shows that in the Indonesian population, the workaholism measurement model can be represented from four dimensions, namely motivational, cognitive, emotional and behavioral.

Keywords: Confirmatory Factor Analysis; Workaholism; Employees

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INTRODUCTION

Work is a means of fulfilling daily needs, be they food, clothing, or shelter. It cannot be denied that now the demands of the times are increasingly advanced and developing, especially in the industrial revolution 4.0, which requires employees to put in more effort to continue working and achieve the targets demanded by the company. Determination of targets within a certain period of time, work demands, workload, environment, and internal conditions of the individual. This can cause individuals to have a tendency to work excessively and experience dependence on their work, which is referred to as workaholism.

Excessive work will cause individuals to become dependent, which can interfere with the functioning of their lives. Some of the impacts that can occur in individuals with workaholism are impaired health and well-being, poor relationships, and conflicts between work and family. Workaholism has empirically been associated with various other negative impacts, such as increased risk of metabolic syndrome, increased systolic blood pressure, sleep difficulties, work-family conflict, and resulting lower relationship satisfaction (Clark, Smith, & Haynes, 2020).

Workaholism is an inner pressure or compulsion to work, persistent and uncontrollable thinking about work, feeling negative emotions when not working or when prevented from working, and overworking beyond what is needed and expected. There are four dimensions measured by workaholism: (1) motivational, involving inner pressure or compulsion to work. This inner compulsion is also referred to as the "drive" to work. (2) Cognitive: persistence; worrying too much about work that cannot be controlled. (3) Emotional: the experience of negative emotions when one does not work or is prevented from working. (4) Behavioural, excessive behavioral involvement in work.

To measure employee workaholism in the workplace, a valid and reliable measuring instrument is needed so that it can produce the right measurements (Azwar, 2014). Clark, Smith, and Haynes (2020) developed workaholism measurement tools from definitions and dimensions to become a scale. Clark, Smith, and Haynes (2020) suggested that further research related to the workaholism scale be developed and retested for validation in a broader context. This is because the participants in this study came from the United States, and the results are not yet known through cross-cultural comparison. Based on this suggestion, the researcher tried to test the workaholism scale in Indonesia on workers aged 18–40 years old (in Hurlock, 1996). To test the scale in Indonesia with different socio-demographics, the language adaptation process of the workaholism scale is needed. The language used in a measuring instrument is an important factor because it can affect the understanding and readability of the data from the instrument (Azwar, 2014). The adaptation of the workaholism measuring instrument is expected to measure the performance behavior of employees who are resources in a company in Indonesia.

Based on this explanation, this study aims to obtain the results of adaptation to culture in Indonesia through several steps, namely conducting content validity tests, item response theory tests, and confirmatory analysis tests. The workaholism measurement tool is considered important to be adapted and developed because it can help companies know the psychological condition of employees so that they can produce individual well-being in the workplace. The workaholism scale is compiled by looking at the individual's motivation, whether there is an inner drive or compulsion to work, individual cognition, whether there is excessive worry when working, how the individual experiences negative emotions when he does not work or is prevented from working, and how the behavior is excessively involved in work.

METHOD

Participants

Participants in this research were 102 employees in Indonesia. Participants in this study consisted of 44 male participants (43.1%) and 58 female participants (56.9%). A total of 3 people work in the business sector (2.9%), 15 people work in state-owned companies (14.7%), 6 people work as teachers (5.9%), 49 people work as private employees (48.0%), 6 people work in the health sector (5.9%), 16 people work in the government

sector (15.7%), and 7 people work in the self-employed sector (6.9%). Participants in this research were taken using incidental sampling techniques and self-report measurement, namely a questionnaire in the form of a Google Form that was distributed online via social media.

Instrument

The workaholism measuring tool developed by Clark, Smith, and Haynes (2020) was adapted by researchers through several stages based on the adaptation process recommended by the ITC Guidelines (ITC, 2017). In this research, the stages carried out include the preparation stage, the translation stage, the expert review stage, the cognitive interview stage, and the data collection stage.

The first step taken when adapting a measuring instrument is that researchers look for journals of measuring instruments that have never been adapted in Indonesia. Researchers read and review definitions, dimensions, psychometrics, and items in measuring instruments. The researcher then contacted the original owner of the scale and asked for permission via email to adapt the measuring instrument, and obtained permission and approval from the original owner of the scale. The next step is for researchers to look for translators who are certified and have good English language skills. The translation uses the forward-backward translation method, where translator 1 is assigned to translate from English to Indonesian and translator 2 translates back to English. The translation was carried out by two translators from sworn agencies, namely Sulistya Ningtyas and Wirda Ningsih from Think Translation. At this stage, the translation format is also given to the translator via email.

The next step is to carry out expert judgment on psychologists and psychology lecturers. Revisions are made based on suggestions and assessments made by experts. In the next stage, cognitive interviews were carried out, which aimed to obtain information on whether the statements on the scale could be understood by the participants. In this process, the researcher first gave a test scale via Google Forms to one private employee in Tangerang and one female employee in Batam. After both participants filled out the scale, the researcher conducted a short interview via WhatsApp by asking whether the statements in the measuring instrument were easy for the participants to understand, whether there was unclear or ambiguous language or meaning, whether there were typos, whether there were repeated statements, and whether there were any suggestions. continuation on a given scale.

The measuring tool is provided in the form of a Google Form that is distributed online via social media sites such as Instagram, WhatsApp, and Twitter. After data collection was carried out, researchers carried out data analysis by testing reliability and validity using SPSS and confirmatory factor analysis (CFA) with the help of the SmartPLS application. The workaholism measuring tool used in this research is based on the theory developed by Clark, Smith, and Haynes (2020), with 16 items consisting of motivational (4 items), cognitive (4 items), emotional (4 items), and behavioral (4 items) dimensions. item). The details of the adapted Workaholism scale can be seen in table 1:

Table 1 Workaholism Scale Details

| Grain | Scale Type | Description | Dimensions |
|-------|------------|-----------------------------------------------------------------------|--------------|
| W 1 | Likert 1-5 | I have always had an inner pressure within me that drives me to work. | Motivational |
| W2 | Likert 1-5 | I work because there is a part of me that feels compelled to work. | Motivational |

| | | | |
|-----|------------|-------------------------------------------------------------------------|--------------|
| W3 | Likert 1-5 | I have a strong inner desire to work all the time. | Motivational |
| W4 | Likert 1-5 | There is a pressure within me that drives me to work. | Motivational |
| W5 | Likert 1-5 | I feel like I can't help but think about work. | Cognitive |
| W6 | Likert 1-5 | In general, I spend my free time thinking about work. | Cognitive |
| W7 | Likert 1-5 | At any given time, most of my thoughts are related to work. | Cognitive |
| W8 | Likert 1-5 | It is difficult for me to stop thinking about work when I stop working. | Cognitive |
| W9 | Likert 1-5 | I find it upsetting to miss a day of active work for any reason. | Emotional |
| W10 | Likert 1-5 | I am almost always frustrated when I am unable to work. | Emotional |
| W11 | Likert 1-5 | I feel upset if I can't get on with work. | Emotional |
| W12 | Likert 1-5 | When something prevents me from working, I usually become agitated. | Emotional |
| W13 | Likert 1-5 | When most of my colleagues are about to take a break, I keep working. | Behaviour |
| W14 | Likert 1-5 | I work more than what is expected of me. | Behaviour |
| W15 | Likert 1-5 | I tend to work longer hours than most of my colleagues. | Behaviour |
| W16 | Likert 1-5 | I tend to work beyond what is required of my job. | Behaviour |

Data analysis method

Content validity can be obtained through the validation of the items in the test, which aims to estimate the suitability of the items in the test to represent the components or the extent to which the items suit the construct being measured (Azwar, 2014). One way that can be used to validate content is through expert judgment (Sugiyono, 2016). The assessment is carried out by giving a number between 1 (very irrelevant) and 4 (very relevant). In this research, the Classical Test Theory (CTT) model approach was used to test construct reliability based on Cronbach's alpha internal consistency technique. The criteria from Kaplan & Saccuzo (2013) were used to evaluate the level of reliability of the measuring instruments in the study. Based on these criteria, a Cronbach's alpha value of .70 means that the measuring instrument is reliable, and a Cronbach's alpha value of .70 indicates that the measuring instrument is unreliable. Apart from that, corrected item-total correlation is also analyzed to evaluate differentiating power. Criteria from Azwar (2014) are used to evaluate differentiating power. Items with a corrected item total of at least 0.30 indicate that the item has satisfactory differentiating data. SPSS version 25 software was used to conduct CTT analysis.

The validity of the internal structure of the workaholism measuring tool in this study was tested with CFA (confirmatory factor analysis) using the SmartPLS application. The aim of the CFA is to confirm the extent to which the items of the adapted test indeed measure a single construct, namely workaholism. In a psychological measuring instrument, all items must measure only one thing, namely the construct to be measured (Umar & Nisa, 2020). In this research, CFA analysis was carried out to look for multidimensional patterns of workaholic items so that groups of items that measure workaholism in employees in Indonesia can be obtained.

RESULT AND DISCUSSION

Result

Based on the CTT test, it was found that the adapted workaholism measuring instrument had an Alpha Cronbach reliability of .931. This shows that 93.1% of the observed score variance is the true score variance, and only 6.9% is the error variance, which can be caused by content sampling error. Therefore, it can be said that the adapted workaholism measuring instrument is reliable. Calculation of the corrected-item total correlation on 13 statement items valued between .530 and .772 indicates that the adapted items are able to distinguish participants based on their workaholism characteristics. In the motivational dimension, there are 3 items that are declared invalid or invalid because the index value of the corrected item total correlation is .30, and the invalid items are items numbers 1, 2, and 4. The following are the results of the items analyzed using CTT:

Table 2 The Results Of The Items Analyzed Using CTT

| Item <i>Workaholism</i> | Dimensi | <i>Corrected Item-Total Correlation</i> |
|-------------------------|--------------|-----------------------------------------|
| M3 | Motivational | .530 |
| K1 | Cognitive | .744 |
| K2 | Cognitive | .772 |
| K3 | Cognitive | .735 |
| K4 | Cognitive | .707 |
| E1 | Emotional | .674 |
| E2 | Emotional | .687 |
| E3 | Emotional | .659 |
| E4 | Emotional | .598 |
| P1 | Behaviour | .763 |
| P2 | Behaviour | .668 |
| P3 | Behaviour | .743 |
| P4 | Behaviour | .662 |

A measuring instrument is said to be reliable if the Cronbach alpha coefficient is in the range of 0 to 1.00 (Azwar, 2014). It can be concluded that the reliability coefficient of the workaholism variable is high, so the measuring instrument can be used.

Table 3 Reliability Test Results of Measuring Tools

| Variabel | <i>Cronbach's Alpha</i> |
|--------------------|-------------------------|
| <i>Workaholism</i> | .931 |

The criteria used to determine the goodness of fit of this measurement model are the root mean square error of approximation (RMSEA) with a 90% confidence interval (90% CI), the comparative fit index (CFI), and the Tucker-Lewis index (TLI). As for the threshold for model acceptance, referring to the criteria put forward by Hair Jr. et al. (2010), having an RMSEA value ranging from 0.05 to .08 can be included in the good fit category. According to Hu and Bentler, if the TLI value is > 0.95 and the SRMR is .08, it is included in the fit category (Brown, 2015; Hooper et al., 2008; Jackson et al., 2009). The CFI value used in research to indicate good fit data is ≥ 0.90 (Ghozali, 2014).

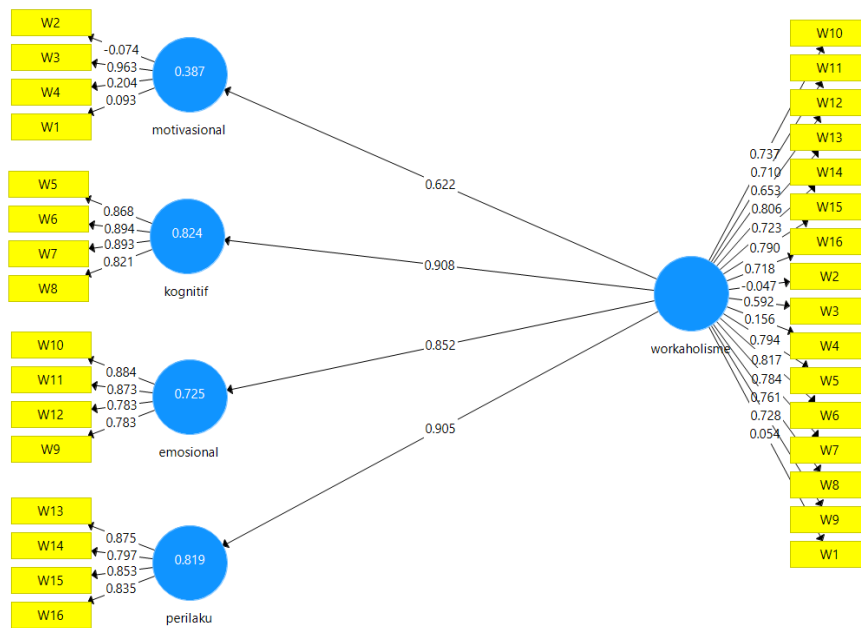


Figure 1 CFA analysis

From the CFA analysis, the criteria used are looking at three categories, namely fit index, fit measure, and factor loading.

Table 4 Statistics and Model Fit Criteria

| Statistics | Fit Criteria | Results | Criteria | Description |
|--------------|-------------------------------------------------|---------|----------|-------------|
| Fit Index | Chi square P-Value | .006 | >.05 | Fit |
| Fit Measures | Root mean square error of approximation (RMSEA) | .070 | ≤ .08 | Fit |
| | Standardized Root Mean Residual (SRMR) | .056 | .05-.08 | Fit |
| | Comparative fit index (CFI) | .962 | >.95 | Fit |
| | Tucker-Lewis Index (TLI) | .950 | >.95 | Fit |

The results of the analyses that have been carried out show that the workaholism measurement model with four dimensions fits the data. Chi-Square 2 (60) = 90.8, $p = .006$ ($p > 0.000$), RMSEA = .070, Standardized Root Mean Residual = .056, Comparative Fit Index (CFI) = .962, and Tucker-Lewis Index (TLI) = .950.

The results of this study also show that the items in this measurement validly measure the dimensions of workaholism ($T > 1.96$), with a range of R2 ranging from .530 to .772. Items on the workaholism scale have good significance because the p-value is .001. Based on the factor loading requirement of .40, the factor loadings of the workaholism measuring instrument are valid. The factor loadings of each item are in the significance range of .40, with a significance of .001. Theoretically, the model is in

accordance with empirical data because the criteria used have met the requirements so that the items can measure the workaholism construct.

Table 5 Factor Loadings

| Factor | Indicator | Estimate | SE | Z | p |
|--------------|-----------|----------|-------|-------|--------|
| Motivational | W3 | 1.197 | .0838 | 14.28 | < .001 |
| Cognitive | W5 | .968 | .0982 | 9.86 | < .001 |
| | W6 | .993 | .0913 | 10.87 | < .001 |
| | W7 | 1.012 | .0960 | 10.54 | < .001 |
| | W8 | .917 | .1079 | 8.50 | < .001 |
| Emotional | W9 | .881 | .1147 | 7.68 | < .001 |
| | W10 | 1.010 | .0975 | 10.36 | < .001 |
| | W11 | .902 | .0908 | 9.94 | < .001 |
| | W12 | .651 | .0833 | 7.82 | < .001 |
| Behaviour | W13 | 1.166 | .1167 | 9.99 | < .001 |
| | W14 | .784 | .0971 | 8.08 | < .001 |
| | W15 | 1.100 | .1147 | 9.59 | < .001 |
| | W16 | .901 | .1058 | 8.52 | < .001 |

Table 5 Outer Loadings

| Factor | Indicator | Matriks |
|---------------|-----------|---------|
| Motivasiional | W1 | .093 |
| | W2 | -.074 |
| | W3 | .963 |
| Kognitif | W4 | .204 |
| | W5 | .868 |
| | W6 | .894 |
| | W7 | .893 |
| | W8 | .821 |
| Emosional | W9 | .783 |
| | W10 | .884 |
| | W11 | .873 |
| | W12 | .783 |
| Perilaku | W13 | .875 |
| | W14 | .797 |
| | W15 | .853 |
| | W16 | .835 |

Discussion

The results of this study indicate that the measurement model developed through the Multidimensional Workaholism Scale is valid for measuring the construct of workaholism. The results of this study support the results of Clark's research, which conducted a validation study of the Multidimensional Workaholism Scale on sample 3c and showed that the 4-dimensional workaholism measurement model was valid with a value of $df = 104$; $p = 0.000$; $RMSEA = .193$; $TLI = .854$; and $CFI = .876$ (Clark et al., 2020).

In this study, there are three items that have a low contribution to the measurement of the motivational dimension. The items are W1, which has the statement "I always have inner pressure within me that encourages me to work", W2, which has the statement "I work because there is a part of me that feels I have to work," and W4, which has the statement "There is pressure within me that encourages me to work," which has low factor loadings that are below .40.

CONCLUSION

Based on the results of confirmatory factor analysis (CFA), it was found that the items of the Multidimensional Workaholism Scale that have been adapted into Indonesian validly measure each dimension of the workaholism construct, which includes motivational, cognitive, emotional, and behavioral dimensions. Theoretically, the results of this study are in accordance with empirical data because the criteria used have met the requirements so that the items can measure the construct of workaholism. However, there are still some items that have a small standardized loading factor (SLF < 4), namely items 1, 2, and 4. These three items should be considered if they want to be used in the workaholism measurement process because they have a very small contribution to the measurement results. Therefore, the language on these items needs to be re-examined, or another option is to create new items that fit the construct of workaholism as an alternative to keeping the composition of items in the measurement instrument proportional. The hope for the future is for researchers who conduct second-order confirmatory factor analysis (CFA) tests to be carried out by other researchers to ascertain whether the motivational, cognitive, emotional, and behavioral dimensions validly form the construct of workaholism.

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