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Adaptation and Psychometric Properties of the Indonesian Version of the Positivity Scale

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Abstract

Positivity, the tendency to view self, life, and the future positively, and to believe in others, was found to contribute toward an individual's functioning based on previous studies. A positivity scale in the Indonesian version is needed to understand better Indonesian people's functioning and improve their well-being. However, the positivity scale was not yet available for Indonesians. This study aimed to adapt the 8-item Positivity Scale into Positivity Scale Indonesian Version (PSIV) and find evidence of its psychometric properties. Data from 218 Indonesians aged 18 years or older were collected using an 8-item PSIV rated on a 5-point scale. The results showed good item discrimination indicated by its corrected-total item correlations (0.35–0.67) and a high internal consistency (α=0.826). The confirmatory factor analysis results after applying the modification model showed that the hypothesized one-factor model fit the criteria indicated by CFI=0.968, TLI=0.950, RMSEA=0.067, SRMR=0.037, and GFI=0.962. The PSIV was correlated with life satisfaction and positive and negative affects. A test-retest reliability conducted on 30 respondents showed a correlation between the first and second times of data collection. Accordingly, PSIV had adequate item discrimination, reliability, and validity. Thus, the PSIV is beneficial to assess the positivity of Indonesian people aged 18 years or older.

Keywords: positivity, positive psychology, scale adaptation

Abstrak

Positivity*, kecenderungan untuk melihat diri sendiri, kehidupan, dan masa depan secara positif, serta percaya kepada orang lain, ditemukan berkontribusi terhadap keberfungsian individu berdasarkan penelitian sebelumnya.* Positivity Scale *dalam versi bahasa Indonesia diperlukan untuk lebih memahami keberfungsian masyarakat Indonesia dan meningkatkan* well-being*. Namun,* Positivity Scale *belum tersedia untuk orang Indonesia. Penelitian ini bertujuan untuk mengadaptasi 8 item Positivity Scale ke dalam Positivity Scale Indonesian Version (PSIV) dan menemukan bukti properti psikometrisnya. Data dikumpulkan dari 218 orang Indonesia berusia 18 tahun atau lebih menggunakan 8 item PSIV dengan skala 5 poin. Hasil penelitian menunjukkan diskriminasi item yang baik dilihat dari korelasi item total terkoreksi (0.35–0.67) dan konsistensi internal yang tinggi (α=0.826). Hasil analisis faktor konfirmatori setelah menerapkan model modifikasi menunjukkan bahwa model satu faktor yang dihipotesiskan memenuhi kriteria yang ditunjukkan oleh CFI=0.968, TLI=0.950, RMSEA=0.067, SRMR=0.037, dan GFI=0.962. PSIV berkorelasi dengan kepuasan hidup serta afek positif dan negatif. Reliabilitas* test-retest *yang dilakukan terhadap 30 responden menunjukkan adanya korelasi antara pengambilan data pertama dan kedua. Disimpulkan bahwa PSIV memiliki diskriminasi item, reliabilitas, dan validitas yang memadai. Dengan demikian, PSIV bermanfaat untuk menilai tingkat* positivity *orang Indonesia yang berusia 18 tahun ke atas.*

Kata kunci: positivity, *psikologi positif, skala adaptasi*

Introduction

The positive psychology movement has encouraged researchers to examine positive characteristics to optimize an individual's functioning. Previous studies have extensively investigated characteristics such as self-esteem, life satisfaction, and optimism and their correlation with well-being (Al Bahar et al., 2021; Ammirati et al., 2015; Du et al., 2017). Prior research, which showed that the three constructs correlated with each other, has encouraged Caprara et al. (2009) to explore the underlying dispositions of self-esteem, life satisfaction, and optimism through a twin study. The results showed that the proportion of variance in self-esteem and life satisfaction was found to be caused by genetic variance, which was 73% on self-esteem and 59% on life satisfaction, while the genetic variance in optimism contributed moderately, which was 28% (Caprara et al., 2009). In support of this finding, the following study discovered, using confirmatory factor analysis, that there is a common latent factor that underlies positive evaluations of self, life, and the future, which was termed positive orientation (Caprara et al., 2010) and in the next study called as positivity (Caprara et al., 2012).

The results of those studies reinforce the importance of investigating basic dispositions that can lead individuals to better appreciate life and view experiences from a more positive perspective. Based on the results of previous studies, this disposition is important to have so that individuals can grow and deal with various difficulties, failures, and losses (Caprara et al., 2012). Hence, Caprara et al. (2012) developed a measurement to directly assess positivity.

Positivity is a quite pervasive mode of how individuals see and deal with reality, affecting how the way they appraise subjective experiences (Caprara et al., 2010). The Positivity Scale (P Scale) was developed to measure positivity, defined as a positive view of self, life, and the future, as well as one's belief in others (Caprara et al., 2012). To the best of the authors' knowledge, the Positivity Scale is currently the only measurement available to provide an overview of individuals' dispositions in viewing themselves, life, and the future positively.

Positivity can be an asset that helps one to view life as something worth living despite various limitations (Caprara et al., 2017). Previous studies have found the benefits of positivity. Positivity was positively correlated with resilience and self-efficacy (Bingöl et al., 2018) and negatively correlated with depressive symptoms (Thartori et al., 2021). Positivity was also found to be a predictor of depression, positive and negative effects, quality of friendships and quality of health over and above self-esteem, life satisfaction, and optimism when analyzed at the same time in the same model as predictors (Alessandri et al., in press, cited in Caprara et al., 2012). It was found that self-esteem, life satisfaction, and optimism contributed only a small amount of variance when the positivity was controlled. The results of a longitudinal study conducted by Alessandri, Caprara, and Tisak (2011, cited in Caprara et al., 2012) also proved that positivity is quite steady when individuals enter adolescence to adulthood.

In the educational setting, the results of a longitudinal study showed that positivity in 12-year-old children could predict prosocial behaviors at 13 years of age through the mediating role of positive school atmosphere perceptions (Luengo Kanacri et al., 2017). The researcher argued that adolescents with high positivity tend to view situations as opportunities and challenges, so they are more attentive and concerned about the needs of others (Luengo Kanacri et al., 2017). It was also found in the sample of undergraduates that the general tendency to do prosocial behavior positively correlated with positivity (Laguna et al., 2022). Another study conducted on forty-five young Mexican athletes showed that positivity had a direct and indirect effect through social support toward burnout (Martínez-Alvarado et al., 2021). In a sample of business students in Vietnam, positivity was found to be positively correlated with the quality of college life (Tho et al., 2020).

In the field of health psychology and medical settings, positivity was found to be negatively correlated with smoking status and with a craving to smoke (Grassi et al., 2014). In the patients with pulmonary, colorectal, and breast cancer, positivity was negatively correlated with decreased physical function at the first time of obtaining a diagnosis and when conducting a follow-up examination a year later (Caprara et

al., 2016). Furthermore, the study found that positivity at the time of diagnosis was associated with less functioning decline one year later. Researchers assume that patients with a high positivity tend to appreciate the available resources better, thus trusting the effectiveness of medical treatment (Caprara et al., 2016). In the industrial and organizational setting, a positive relationship was found between positivity and job satisfaction mediated by work-life balance (Orkibi & Brandt, 2015), which means that positivity can facilitate employees' ability to balance work-life demands to enhance job satisfaction. Another study showed that employee positivity correlated with school grades and citizenship behaviors with self-efficacy as the mediator (Barbaranelli et al., 2019).

In Indonesia, research in the area of positive psychology has also been growing rapidly, including studies on self-esteem, life satisfaction, and optimism and their positive impacts on quality of life and psychological well-being (Nufus & Tatar, 2017; Subagya et al., 2018; Wahyuni & Maulida, 2019). Nevertheless, there has not been adequate research on individuals' dispositions in viewing themselves, their lives, and their future positively, as summarized in the concept of positivity. It is important to adapt the Positivity Scale in the Indonesian context because previous studies showed that positivity contributes to well-being, health, prosocial behavior, satisfaction, school grades, and many more. Hence, individuals' positivity can be considered when designing psychological interventions to optimize individual functioning in Indonesia. Given the need to research positivity in Indonesia, this study was conducted to adapt the Positivity Scale (P Scale) for Indonesian adults, called the Positivity Scale Indonesian Version (PSIV), with good item discrimination, reliability, and validity. To the best of the authors' knowledge, this is the first study of the positivity scale's adaptation in Indonesia. The PSIV is expected to fulfill the need to conduct research on positivity and enrich knowledge in the field of positive psychology.

Methods

The adaptation of the positivity scale to the Indonesian version was conducted following The International Test Commission Guidelines for Translating and Adapting Tests (International Test Commission, 2018). First, the authors communicated through email with Gian Vittorio Caprara, one of the researchers, who developed the P Scale (Caprara et al., 2012), then obtained permission to adapt the scale to the Indonesian version. The second stage was conducted by adapting the P Scale. First, forward translation and backward translation were conducted to strengthen the quality of test adaptation results (International Test Commission, 2018) The criteria for translators are having adequate knowledge of the relevant language, culture, test content, and test principles. In this study, the translation from the original measuring instrument to Indonesian (the forward translation) was carried out independently by two translators who have an adequate understanding of English (TOEFL score above 550), were Indonesian native speakers, and have an educational background in psychology, so that they have an adequate understanding of the principles of psychological testing and psychological test construction.

Then, the authors combined the results of the forward translations, selecting the words that better fit the meaning of the original items and are easier to comprehend. After combining the results of two translations, a back-translation was conducted by two translators with a background in psychology, an adequate understanding of the principles of psychological testing and psychological test construction, and an adequate understanding of English (TOEFL score above 550). The translation result was reviewed through the expert review method. Four licensed clinical psychologists who were actively practicing independently reviewed the items based on their relevance with the construct and language of the instrument. This expert review was conducted based on the method of content validity index according to Polit and Beck (2006). The experts gave an assessment using a Likert scale of 1 - 4 (1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, 4 = very relevant).

Then the assessments given by the expert reviewers were also scored using the method of content validity index according to Polit and Beck (2006). A value of 1 or 2 from reviewers was scored as 0.00, while a value of 3 or 4 from reviewers was scored as 1.00. With four expert reviewers, the items that can

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be used are items with an item's content validity index (I-CVI) of 1.00, which means that all reviewers give a value of 3 or 4 on the item (Polit & Beck, 2006). The scale's content validity index (S-CVI) analysis was also carried out by calculating the average I-CVI score or also known as S-CVI/Ave. With four expert reviews, the scale can be used if it has an S-CVI/Ave of 1.00 (Polit & Beck, 2006).

The cognitive interview was conducted with five participants, Indonesian people aged above 18 years old, using verbal retrospective probing. With this technique, the participants were asked to answer the survey questions provided. The interviewer then asked questions to explore how the interviewees perceived and processed each item before choosing the answers. The results showed that all the participants' understanding of each item was in line with the item's intent, and there were no significant difficulties in taking the test. Thus, all items and the scale satisfied the validity evidence based on the response process. The final PSIV scale consisted of 8 items rated on a 5-point scale (1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

Data were collected from Indonesian people aged 18 years or older from November 12th until November 27th in 2021 through an online form. All the participants received information about the researcher, the purpose of the study, and the estimated duration of filling out the form. They were also informed that all data given would be kept confidential and anonymized, that they were allowed to withdraw from the research at any time, that there was no direct benefit they would gain, and that there was no harmful effect from the research. After the participants provided consent, they could continue to fill out all the questionnaires.

The internal reliability was tested using Cronbach's alpha coefficient. The test-retest reliability was conducted by analyzing the correlation between the first time of data collection and the second time with an interval time of ten days or more. The analysis item was conducted by analyzing the proportion of endorsement and the corrected-total item correlations.

The validity evidence was collected through convergent and discriminant validation and also construct validation. The convergent validity evidence was conducted based on its relations to other variables by correlating PSIV with life satisfaction, positive affect, and negative affect. Referring to a previous study conducted by Caprara et al. (2012), positivity was positively correlated with life satisfaction and positive affect and negatively correlated with negative affect. Therefore, in this study, the Satisfaction with Life Scale (SWLS) and Positive and Negative Affect Schedule (PANAS), which have been adapted to the Indonesian version by Akhtar (2019), were used. Both scales have been tested on 1003 respondents and the results showed a coefficient alpha of 0.828 with a corrected item-total correlation between 0.553 – 0.686 for SWLS, a coefficient alpha of 0.861 with a corrected-item total correlation between 0.450 – 0.664 for positive affect, and coefficient alpha of 0.853 with a corrected-item total correlation between 0.413 – 0.699 for negative affect (Akhtar, 2019). The convergent validity was also conducted by calculating construct reliability (CR) and average variance extracted (AVE) of PSIV. Then, discriminant validity was conducted by examining the comparison of squared correlation with AVE from the observed relationship between positivity with positive affect and negative affect. Finally, the construct validity evidence was conducted based on the internal structure of PSIV through confirmatory factor analysis.

Results and Discussion

Results

Data were collected from 218 respondents aged between 18-57 years old (M = 26, SD = 9.33), consisting of 76.6% female. Most of the respondents live in West Java (43.6%), Jakarta (17%), and Yogyakarta (8.7%) and have completed a bachelor's degree as their last education (56.4%).

In this study, each item obtained an I-CVI score of 1.00 and an S-CVI/Ave score of 1.00. Thus, all items and scales satisfied the validity evidence based on the test content (Polit & Beck, 2006). The full results can be seen in Table 1.

Table 1. Content Validity Index.

No	Value				Scoring				
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 1	Expert 2	Expert 3	Expert 4	I-CVI
1	4	4	4	4	1.00	1.00	1.00	1.00	1.00
2	4	4	4	4	1.00	1.00	1.00	1.00	1.00
3	4	4	4	3	1.00	1.00	1.00	1.00	1.00
4	4	4	4	3	1.00	1.00	1.00	1.00	1.00
5	4	4	4	3	1.00	1.00	1.00	1.00	1.00
6	4	3	4	4	1.00	1.00	1.00	1.00	1.00
7	4	4	4	4	1.00	1.00	1.00	1.00	1.00
8	3	3	3	3	1.00	1.00	1.00	1.00	1.00
								S-CVI/Ave	1.00

Each item was found to have a proportion of endorsement (PoE) between 0.2 – 0.8, proving the answers were equally distributed. The corrected item-total correlation (cr_{iT}) of PSIV was in the range of 0.35 – 0.67, meaning the item could discriminate the individuals with a high and low level of positivity. The full results can be seen in Table 2.

Table 2. Item Discrimination.

No	Item	cr_{iT}
1	Faith in the future	0.63
2	Satisfaction with life	0.67
3	Believe in others	0.35
4	Hope and enthusiasm toward the future	0.56
5	Satisfaction with the self	0.65
6	Clarity of the future	0.36
7	Proud of the self	0.53
8	Confident in the self	0.66

The reliability coefficient of the PSIV test was conducted using Cronbach's Alpha with the result of $\alpha = 0.826$. The Pearson Product-Moment Correlation test was conducted to determine the relationship between scores from the first and second data collection on the same subject ($N = 30$) with a time span of 10 - 18 days (average of 13 days). The results show a high positive correlation between PSIV scores of the first and the second time data collection, $r = 0.849$, $p<0.01$, one-tailed.

The results showed a positive correlation between PSIV and SWLS, $r = 0.758$, $p<0.01$, one-tailed, proving that the higher the positivity, the higher the life satisfaction. Furthermore, a positive correlation between PSIV and the positive effect of PANAS was found, $r = 0.436$, $p<0.001$, one-tailed, which means that the higher the positivity, the higher the positive effect. Finally, it was found that there was a negative correlation between PSIV and the negative effect of PANAS, $r = -0.368$, $p<0.01$, one-tailed, which means that the higher the positivity, the lower the negative effect.

The construct reliability (CR) and average variance extracted (AVE) calculations were also conducted to examine the convergent validity. The results showed that the CR was 0.684, and the AVE was 0.229. The discriminant validity through comparison of squared correlation with AVE showed that discriminant validity was obtained from the observed relationship between positivity with positive affect and negative affect as presented in Table 3.

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Table 3. Discriminant Validity.

	Factor Correlation	Comparison of Squared Correlation with AVE	Discriminant Validity
PSIV ↔ PA	0.436	0,190 < AVE	Established
PSIV ↔ NA	-0.368	0,135 < AVE	Established

The results of confirmatory factor analysis (CFA) showed χ^2 (20, N = 218) = 63.105, p<0.001, Comparative Fit Index (CFI) = 0.922, Tucker Lewis Index (TLI) = 0.891, Root Mean Square Error of Approximation (RMSEA) = 0.099, Standardized Root Mean Square (SRMR) = 0.046, and Goodness of Fit Index (GFI) = 0.937.

There were modification indices proposed from the results of CFA. Following the suggestion of modification indices, the pairs of residual correlation between item 2 with item 5 and item 1 with item 4 were included in the modification model. After modifying the model, the modified model showed improvement in indices value, which were χ^2 (18, N = 218) = 35.797, p<0.007, CFI = 0.968, TLI = 0.950 RMSEA = 0.067, SRMR = 0.037, and GFI = 0.962. This modified model can be seen in Figure 1.

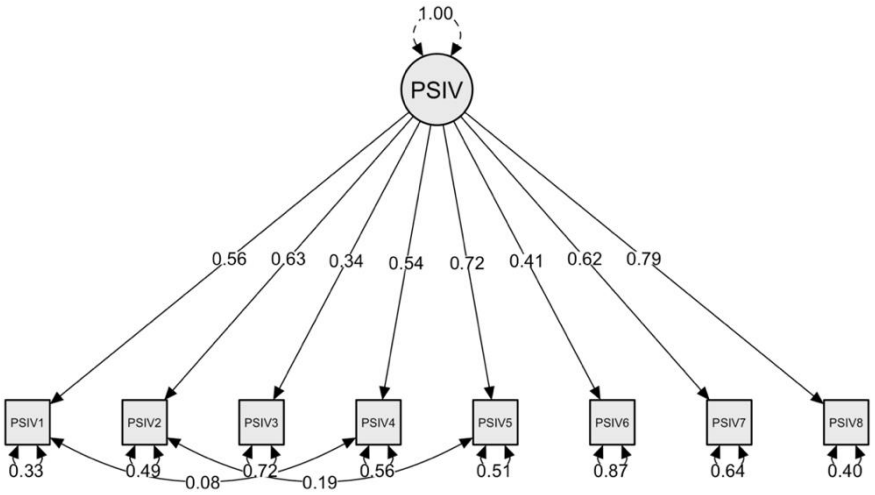

Figure 1. One-Factor Model after Modification.

Finally, factor loadings analysis was conducted using a confirmatory factory analysis test. Each item was found to have factor loadings in the range of 0.37 – 0.78, as seen in Table 4 and Figure 2. There were two items which have factor loadings in the range of ±0.30 – ±0.40, four items equal to or above 0.50, and 2 items that were equal to or above 0.70.

Table 4. Factor Loadings.

No	Item	Value
1	Faith in the future	0.696
2	Satisfaction with life	0.670
3	Believe in others	0.376
4	Hope and enthusiasm toward the future	0.585
5	Satisfaction with the self	0.709
6	Clarity of the future	0.406
7	Proud of the self	0.613
8	Confident in the self	0.781

Factor loadings

Factor	Indicator	Symbol	Estimate	Std. Error	z-value	p	95% Confidence Interval		Std. Est. (all)
							Lower	Upper	
PSIV	PSIV1	λ11	0.558	0.052	10.728	< .001	0.456	0.660	0.696
	PSIV2	λ12	0.630	0.062	10.177	< .001	0.508	0.751	0.670
	PSIV3	λ13	0.344	0.065	5.273	< .001	0.216	0.471	0.376
	PSIV4	λ14	0.539	0.063	8.562	< .001	0.415	0.662	0.585
	PSIV5	λ15	0.721	0.066	10.991	< .001	0.592	0.850	0.709
	PSIV6Reversed	λ16	0.414	0.072	5.733	< .001	0.273	0.556	0.406
	PSIV7	λ17	0.620	0.067	9.226	< .001	0.488	0.752	0.613
	PSIV8	λ18	0.787	0.063	12.574	< .001	0.664	0.909	0.781

Figure 2. Factor Loadings.

Discussion

The item analysis was conducted by calculating the proportion of endorsement and corrected-total item correlation. The results above showed that all items have proportions of endorsement in the range of 0.2 – 0.8, meaning that the answers were evenly distributed and not centered on one extreme pole, according to Alrubaiy et al. (2014). All items of PSIV were also found to have good discriminating power on the overall PSIV scale as indicated by the scores of corrected item-total correlations greater than 0.20, which means that each item is said to be good according to Clark & Watson (1995) and hence could differentiate the individuals with a high and low level of positivity.

A test is said to be very reliable if it has a reliability coefficient above 0.8 (Ursachi et al., 2015). Hence, by using the Cronbach's Alpha method, PSIV has been shown to have an adequate level of internal consistency, with 82.6% of the variance of the observed score is the variance of the true score and 17.4% of the variance of the observed score is the variance of error which could be influenced by content sampling and content heterogeneity.

The Pearson Product-Moment Correlation test was conducted to examine the test-retest reliability by analyzing the correlation between scores from the first and second data collection on the same subjects. The results showed that there was a high positive correlation between PSIV scores for the first and the second time data collection, proving its stability over time, with 84.9% of the variance of the observed score is the variance of the true score and 15.1% of the variance of the observed score is the variance of error which could be influenced by time sampling error.

The Pearson Product-Moment Correlation of PSIV scores with SWLS to measure life satisfaction and PANAS to measure positive and negative affect were conducted with a total of 212 respondents to find the validity evidence based on relations to other related constructs. The results show a positive correlation between PSIV and SWLS, with 57.4% of the variance of life satisfaction explained by positivity. Furthermore, a positive correlation between PSIV and positive affect was found, with 19% of the positive affect variance explained by positivity. There was also a negative correlation between PSIV and negative affect, with 13.5% of negative affect explained by positivity. These results were in line with a previous study conducted by Caprara et al. (2012) in which positivity was found to be positively correlated with life satisfaction and positive affect and negatively correlated with negative affect. Thus, PSIV has adequate validity evidence based on its relation with other tests.

The convergent validity was conducted through construct reliability (CR) and average variance extracted (AVE). The results showed that the CR was 0.684, which proved the reliability of the construct, and the AVE was 0.229, which showed that more than 50% of the indicators' variance was due to measurement error (Fornell & Larcker, 1981). Nevertheless, the convergent validity is still acceptable if the CR was more than 0.6, although the AVE was less than 0.5 (Fornell & Larcker, 1981). Hence, the convergent validity is fulfilled. The discriminant validity was established for the observed relationship between the positivity of PSIV with positive affect and the negative effect of PANAS based on the

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comparison of squared correlation with AVE (Fornell & Larcker, 1981). This proved that PSIV measures a distinct construct from PANAS.

The validity of evidence based on the internal structure was examined through CFA. The results showed that the hypothesized one-factor model fit the criteria of SRMR below 0.08 and GFI above 0.90 (Hooper et al., 2008). However, the model was not fit referring to the criteria of chi-square p>0.05 (Umar & Nisa, 2020), CFA and TLI >0.95 (Hu & Bentler, 1999), and RMSEA <0.08 (Hooper et al., 2008).

From the first model, there were modification indices proposed by the CFA test result. The most significant modification index was 24.416, with the suggestion to include the correlation between the residuals of item 2 and item 5. Both items had similarities in satisfaction. The second item states, "*Saya puas dengan hidup saya* [I am satisfied with my life]", while the fifth item states "*Secara keseluruhan, saya puas dengan diri saya* [Generally, I am satisfied with myself]". People in Western countries are assumed to be better at distinguishing between satisfaction with life and satisfaction with oneself.

Meanwhile, Indonesian people tend to perceive satisfaction with themselves in line with satisfaction with life as a whole because they see "the self" in the context of the role they play, such as their role in a family context, work context, and other contexts. This can lead to a tendency where individuals who are satisfied with life will also be satisfied with themselves. These cultural differences reinforced the issue brought by Shou et al., (2022) about the importance of adaptation and validation in Asian people, so that accurate assessment can be obtained.

The modification indices proposed by the confirmatory factor analysis test result also suggested correlating the residuals of item 1 and item 4. Both items come from the same indicator which is related to a positive view of the future. The first item states "*Saya memiliki keyakinan yang kuat bahwa masa depan saya akan baik* [I have a strong belief that my future will be good]", while the fourth item states "*Saya menantikan masa depan dengan harapan dan antusiasme* / [I look forward to the future with hope and enthusiasm]". This was in line with the previous research model (Caprara et al., 2012), in which the relation of the residuals of items 1 and 4 was incorporated into the modification model. Hence, this study included both pairs of items in the modification model.

The modification index showed that other factors underlie the pairs item of item 2 with item 5 and item 1 with item 4. However, it is not the focus of this study, so the residual correlation of the pair items was included in the model but not treated as a separate factor. The modified model showed that the results met the criteria of a fit model with CFI and TLI above 0.95, GFI above 0.90, SRMR below 0.08, and RMSEA below 0.07. The significant value of chi-square (p<0.05) could happen because the index of chi-square is very sensitive to the sample size, where the larger the sample, the more likely the results to show significance even when the model is fit (Umar & Nisa, 2020).

The results also show that all items have a factor loading above 0.30, indicating that all items contribute to the construct. This was based on Hair et al. (2019) that an item that has a factor loading in the range of ±0.30 – ±0.40 is said to fulfill the minimum level for interpreting structure, a loading of ±0.50 is categorized as practically necessary, and a factor loading of ±0.70 is classified as well-defined structure and is expected from factor analysis.

Conclusion

This study aims to adapt the Positivity Scale to the Indonesian Version with good item discrimination, reliability, and validity. The results showed that Positivity Scale Indonesian Version (PSIV) contained items that can differentiate between individuals with high and low positivity, has good internal and test-retest reliability, and has adequate validity based on test content indicated by CVI from expert reviewers, convergent validity based on its relation with life satisfaction and affects, and validity based on internal structure through CFA. Hence, PSIV can be used to assess the positivity levels of Indonesian people aged 18 years or older and helps expand positive psychology research.

This study was the first to adapt the Positivity Scale to the Indonesian Version and examine its psychometric properties. This study has a limitation in constructing the norm due to the relatively small sample size; therefore, future research can examine the psychometric properties of PSIV in a larger sample and construct the norm. Another limitation of this study is the test-retest reliability conducted in a small sample within a relatively short interval between the first and the second time of data collection. Therefore, future research can conduct the test-retest reliability with a longer interval time to ensure its stability over a longer time. Previous studies showed a correlation between PSIV with similar construct tests, such as self-esteem and optimism, but these results have not been studied in this study. Accordingly, future research could also be conducted to add the validity of evidence based on the relation to related constructs. Future researchers could contact the corresponding author of this study to access the full version of PSIV if needed.

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