

Construct and Psychometric Properties of the Self-Care

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Article history

Received: 07 Juni 2026

Revised: 04 Juli 2026

Accepted: 20 Agustus 2026

Published: 31 Agustus 2026

Abstract

Self-care is an essential individual competence for maintaining physical and psychological health, including among university students, yet comprehensive and contextually appropriate self-care measurement instruments remain limited. This study aimed to develop and evaluate the psychometric properties of a Self-Care Scale based on Barbara Riegel's theory, comprising three dimensions: self-care maintenance, self-care monitoring, and self-care management. A quantitative scale-construction approach was employed, involving blueprint development, item construction, readability testing, content validation, data collection among students at UIN Sunan Gunung Djati Bandung, and validity and reliability testing. The findings indicate that the developed instrument demonstrates adequate content validity, construct validity, and reliability. The proposed three-dimensional structure is supported by confirmatory factor analysis and is consistent with the theoretical model. The instrument also effectively distinguishes self-care from other psychological constructs, indicating its suitability as a self-care measure for university students.

Keywords: *Self-Care, Psychometric Scale, Construct Validity, Reliability, University Student*

Abstrak

Self-care merupakan kemampuan individu dalam menjaga kesehatan fisik dan psikologis yang penting dimiliki, termasuk oleh mahasiswa, namun instrumen pengukuran self-care yang komprehensif dan sesuai konteks lokal masih terbatas. Penelitian ini bertujuan mengonstruksi dan menguji properti psikometrik Skala Self-Care berdasarkan teori Barbara Riegel yang mencakup tiga dimensi, yaitu self-care maintenance, self-care monitoring, dan self-care management. Penelitian menggunakan pendekatan kuantitatif dengan metode konstruksi skala, meliputi penyusunan blueprint, pengembangan item, uji keterbacaan, validasi isi, pengumpulan data pada mahasiswa UIN Sunan Gunung Djati Bandung, serta pengujian validitas dan reliabilitas. Hasil penelitian menunjukkan bahwa instrumen yang dikembangkan memiliki validitas isi, validitas konstruk, dan reliabilitas yang memadai. Struktur tiga dimensi yang diajukan didukung oleh hasil analisis faktor konfirmatori dan sesuai dengan model teoritis. Instrumen ini juga mampu membedakan konstruk self-care dari konstruk psikologis lain, sehingga layak digunakan sebagai alat ukur self-care pada mahasiswa.

Kata kunci: Skala Psikometrik, Validitas Konstruk, Reliabilitas, Mahasiswa

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PENDAHULUAN

College students are a group in the transitional phase toward adulthood who face various academic, social, organizational, and personal demands. During this period, students need to adapt to a new environment, meet academic goals, build social relationships, and prepare for their future careers. These various demands can be a source of psychological stress that impacts students' mental health. Research on college students shows that academic stress is associated with lower mental well-being and increased vulnerability to psychological problems. (Barbayannis et al., 2022). These findings highlight the importance of individuals' ability to independently maintain and manage their health so they can continue to function optimally. One approach that can be taken is through the practice of self-care that is, the conscious and sustained behavior of maintaining one's own health and well-being (Schmitt & Prasastyoga, 2024). Consequently, identifying the determinants of self-care is important for developing evidence-based strategies that promote students' mental health and adaptive functioning in higher education settings.

Self-care is a concept that describes an individual's efforts to maintain health, recognize changes in their condition, and take appropriate action when specific health needs arise. In the updated Middle-Range Theory of Self-Care of Chronic Illness, self-care is understood as a dynamic process that continues throughout life and encompasses three main components: self-care maintenance, self-care monitoring, and self-care management (Riegel et al., 2025). Self-care maintenance refers to behaviors performed to maintain physical and emotional stability. Self-care monitoring relates to an individual's ability to monitor changes in their physical and psychological condition. Meanwhile, self-care management refers to the ability to make decisions and take action when an individual notices certain symptoms or changes in themselves (Luciani et al., 2022).

Self-care plays a crucial role in maintaining an individual's psychological well-being. In the context of college students, self-care interventions have been shown to help improve self-care efficacy and support mental health management through emotion regulation strategies (Zhong & Xie, 2023). Self-care programs that combine mental and physical health education have also shown positive results, such as increased knowledge about self-care, the development of healthier habits, and reduced stress levels among students (Jafari, 2024). Furthermore, self-care practices such as physical activity, relaxation, enjoyable activities, and energy management are associated with greater vitality and fewer health complaints (Schmitt & Prasastyoga, 2024). These findings suggest that self-care can serve as an important protective factor for individuals in coping with daily stress.

Nevertheless, research on self-care still faces several limitations. Most studies focus primarily on health-maintenance behaviors, such as physical activity, healthy eating, rest, and adherence to health recommendations. As a result, the dimensions of self-care monitoring and self-care management have not always received equal attention compared to self-care maintenance. In fact, self-care involves not only health-maintenance behaviors but also the ability to recognize changes in one's condition and determine an appropriate response to those changes (Riegel et al., 2021). This situation highlights the need for a self-care measurement tool capable of comprehensively representing all dimensions.

In the context of psychological measurement, instrument development must be carried out through a systematic process to ensure that the resulting measurement tool is valid and reliable. This process includes defining the construct, developing indicators, developing items, determining the response format, conducting readability or pilot tests, analyzing items, and testing construct validity and reliability (Fei et al., 2025). These steps are essential to ensure that each item truly represents the construct being measured and yields psychometrically sound data. As a result, establishing strong evidence of validity and reliability is fundamental to ensuring that the instrument provides meaningful and defensible interpretations of the measured construct.

Most of the self-care instruments that have been developed are still widely used in clinical populations, particularly among individuals with chronic illnesses. Several recent psychometric studies indicate that the Self-Care of Chronic Illness Inventory (SC-CII) has adequate evidence of validity and reliability among patients with chronic illnesses across various cultural contexts (Arapı et al., 2023). However, students differ from clinical populations because they are generally in early adulthood, face unique academic and social demands, and do not necessarily have chronic illnesses. Previous research has also demonstrated the development and validation of multidimensional self-care instrument specifically for university students, suggesting that self-care in this population may encompass various aspects of physical, psychological, emotional, relational, and spiritual functioning (Soto et al., 2024). Therefore, instruments developed for patients with chronic illnesses cannot be fully assumed to be appropriate for the student context.

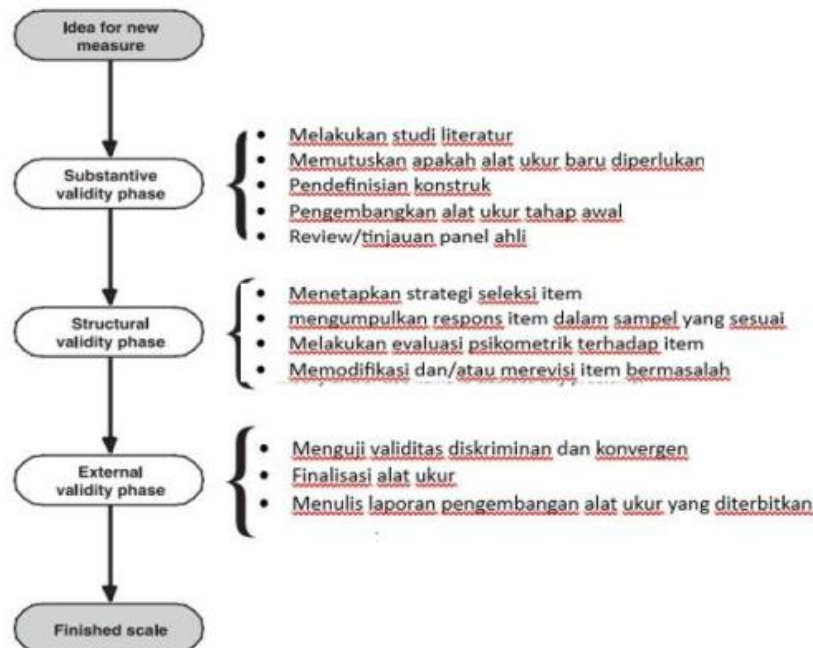
A self-care instrument for the general adult population has been developed through the Self-Care Inventory (SCI). This instrument was developed based on the Middle-Range Theory of Self-Care framework and includes three scales: self-care maintenance, self-care monitoring, and self-care management. Testing results indicate that the SCI has preliminary evidence of validity and reliability supporting its use among the general adult population (Luciani et al., 2022). However, the instrument has not been specifically designed for Indonesian college students, a non-clinical population with distinct developmental contexts, academic demands, and sociocultural backgrounds.

Based on this review, there is a need to construct a self-care scale relevant to Indonesian students while maintaining the three main dimensions of self-care: self-care maintenance, self-care monitoring, and self-care management. This study contributes by developing and validating a Self-Care Scale for students at UIN Sunan Gunung Djati Bandung through psychometric property analysis. The scale is expected to enrich self-care measurement and provide a valid and reliable instrument for psychological research and practice. Therefore, this study aims to construct and test the psychometric properties of the Self-Care Scale among students at UIN Sunan Gunung Djati Bandung.

METODE

This study employs a quantitative approach with a scale construction and psychometric testing design. A quantitative approach was used because this study aims to develop a self-care measurement tool and evaluate its psychometric quality through validity and reliability analyses. The development of a psychological scale must be conducted systematically, starting from construct definition, item development, content evaluation, data collection, to testing the psychometric quality of the instrument (Stefana et al., 2024). In this study, the self-care construct was developed based on three main dimensions: self-care maintenance, self-care monitoring, and self-care management. The population for this study consisted of 631 students at Sunan Gunung Djati State Islamic University in Bandung. The study sample comprised 336 students selected using simple random sampling. This technique was used to ensure that every member of the population had an equal chance of becoming a respondent. Students were chosen as research subjects because they are in a developmental phase characterized by academic, social, organizational, and personal demands, which require self-care skills to maintain their physical and psychological well-being.

The instrument used in this study was the self-care scale developed by the researcher. The development of the instrument began with a literature review on the concept of self-care to determine the dimensions, indicators, and behavioral patterns to be measured. After the constructs and indicators were established, the researcher developed an instrument blueprint as the basis for writing the items. The following chart outlines the stages of its construction:

Figure 1. Stages of the Research Methodology

The scale consists of eight positive items representing three dimensions of self-care. All items use a Likert scale with five response options: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), and Strongly Agree (SA). Scores range from 1 to 5; thus, the higher the score, the higher the respondent's level of self-care.

Before being used in the main data collection, the instrument first undergoes a content validity and readability evaluation process. Content validity is assessed to evaluate the alignment of items with the indicators and constructs to be measured. Content validity is crucial in instrument development because it helps ensure that the content of the measurement tool represents relevant aspects, is sufficiently comprehensive, and is understandable to respondents (Mokkink et al., 2025). The content validity assessment was conducted by six raters and then analyzed using Aiken's V coefficient. The use of Aiken's V helps to quantitatively summarize expert assessments of item relevance (Kania et al., 2024). Additionally, a readability test was administered to six students with characteristics similar to the study population to assess the clarity of the language, the ease of understanding the items, and the appropriateness of the terms used in the scale.

Data collection was conducted by distributing the Self-Care Scale questionnaire to respondents selected as the study sample. Respondents were asked to provide answers based on their own circumstances and experiences. The data analyzed consisted of fully completed responses that met the requirements for psychometric testing.

Data analysis was conducted in several stages. The first stage was content validity analysis using Aiken's V to assess item suitability based on raters' evaluations. The second stage was item discrimination analysis using corrected item-total correlation via SPSS. Items were deemed suitable if they had an adequate item-total correlation and were able to distinguish between respondents with different levels of self-care. Validity and reliability testing of the questionnaire is necessary to ensure that the instrument accurately and consistently measures the intended construct. (Ranganathan et al., 2024).

The next step was to test construct validity using Confirmatory Factor Analysis (CFA) with LISREL to assess the fit of the three-dimensional self-care theoretical structure to empirical data. Model fit was evaluated using RMSEA, NFI, NNFI, CFI, and IFI. After the model fit the data, construct reliability was assessed using Construct Reliability (CR) and Variance Extracted (VE), while internal reliability was tested using Cronbach's Alpha via SPSS.

Convergent and discriminant validity are used as additional evidence to assess the quality of a measurement instrument. Convergent validity is tested by examining the relationship between the Self-Care Scale and other constructs that are conceptually similar, while discriminant validity is tested by comparing the Self-Care Scale with other, distinct constructs. It is important to evaluate reliability, convergent validity, and discriminant validity so that the quality of measurement of latent constructs can be reported more robustly and transparently (Cheung et al., 2024). In this study, convergent and discriminant validity were tested using Pearson's correlation analysis between the Self-Care Scale and measures of self-compassion, mental health literacy, self-neglect, and self-stigma of mental illness.

HASIL DAN PEMBAHASAN

Hasil Penelitian

Indicator

According to Riegel (2012), self-care is a complex and dynamic lifelong process of maintaining health through health-promoting behaviors aimed at recognizing and managing symptoms. There are three dimensions used to measure self-care attributes: self-maintenance, self-monitoring, and self-management.

Table 1. Self Maintenance

No.	Indicator	Item
1.	Get into the habit of getting enough rest by meeting your needs	I make it a habit to get enough rest by meeting my sleep needs
2.	Staying physically fit by exercising regularly	I stay in shape by exercising regularly
3.	Avoiding behaviors that can harm your physical health	I avoid behaviors that could have a negative impact on my physical health
4.	Dealing with academic pressure while staying calm	I stay calm when facing academic pressure

Table 2. Self Monitoring

No.	Indicator	Item
5.	Being aware of changes occurring in the body	I noticed I was losing weight when I was under a lot of academic pressure
6.	Adjusting activities based on physical condition	I cut back on my daily activities when I feel tired

Table 3. Self Management

No	Indicator	Item
7.	Get a routine health checkup at least once every 6 months	I get a routine health checkup at least once every six months
8.	Understanding emotional changes as a basis for determining the appropriate course of action	I understand emotional changes in order to determine the right course of action

Case Analysis

a. Content Validity Test (Aiken)

After the items were finalized, the next step taken by the researcher was to conduct a content validity test by distributing the items to six people to assess whether each item was capable of measuring the intended indicators. The content validity test was based on the technique formulated by Aiken.

Using Aiken's content validity formula, the researcher concluded the results of the content validity test as follows:

Table 4. Content Validity Test

No.	Statement	Values	Conclusion
1	I make it a habit to get enough rest by meeting my sleep needs	0,83	Valid
2	I stay in shape by exercising regularly	0,96	Valid
3	I avoid behaviors that could have a negative impact on my physical health	0,96	Valid
4	I stay calm when facing academic pressure	0,96	Valid
5	I noticed I was losing weight while dealing with intense academic pressure	0,96	Valid
6	I cut back on my daily activities when I feel tired	0,96	Valid
7	I get a routine health checkup at least once every six months	1	Valid
8	I understand emotional changes in order to determine the right course of action	0,92	Valid

The results of the content validity test show that all items have a V value above 0.5, which exceeds the minimum threshold for acceptable content validity. Thus, the Self-Care measurement tool is considered valid and suitable for measuring the variables in question.

b. Item Differences Test

Tabel 5. Item Differences Test

No.	Statement	Corrected Item-Total Correlation	Conclusion
1.	I make it a habit to get enough rest by meeting my sleep needs	0,523	Accepted (High Correlation)
2.	I stay in shape by exercising regularly	0,62	Accepted (High Correlation)
3.	I avoid behaviors that could have a negative impact on my physical health	0,644	Accepted (High Correlation)
4.	I stay calm when facing academic pressure	0,517	Accepted (High Correlation)
5.	I noticed I was losing weight while dealing with intense academic pressure	0,415	Accepted (High Correlation)
6.	I cut back on my daily activities when I feel tired	0,378	Accepted (High Correlation)
7.	I get a routine health checkup at least once every six months	0,521	Accepted (High Correlation)
8.	I understand emotional changes in order to determine the right course of action	0,474	Accepted (High Correlation)

The results of the item discrimination analysis using corrected item-total correlations show that all items have values above 0.30. The correlation values ranged from 0.378 to 0.644. The highest value was obtained by the item "I avoid behaviors that could negatively impact my physical health," at 0.644, while the lowest value was obtained by the item "I reduce my daily activities when I feel tired," at 0.378.

c. Multidimensional Validity Test

After conducting a content validity test, the researcher distributed the questionnaire to 631 respondents. To assess internal consistency and validity, item-total correlation analysis was performed using Pearson's product-moment correlation. Each dimension's total score was correlated with the total score. This process evaluated the extent to which each dimension aligned with the overall construct. The results of the item-total correlation test are as follows:

Table 6. Correlation Test

No.	Dimensional	Pearson Correlation	Conclusion
1.	Self Maintenance	0,884	Accepted (High Correlation)
2.	Self Monitoring	0,640	Accepted (High Correlation)
3.	Self Management	0,730	Accepted (High Correlation)

The results of the item-total correlation analysis, which serves as a test of internal consistency, show that all three dimensions have correlation coefficients greater than 0.60. Therefore, these dimensions indicate that there is a strong correlation between each pair of dimensions.

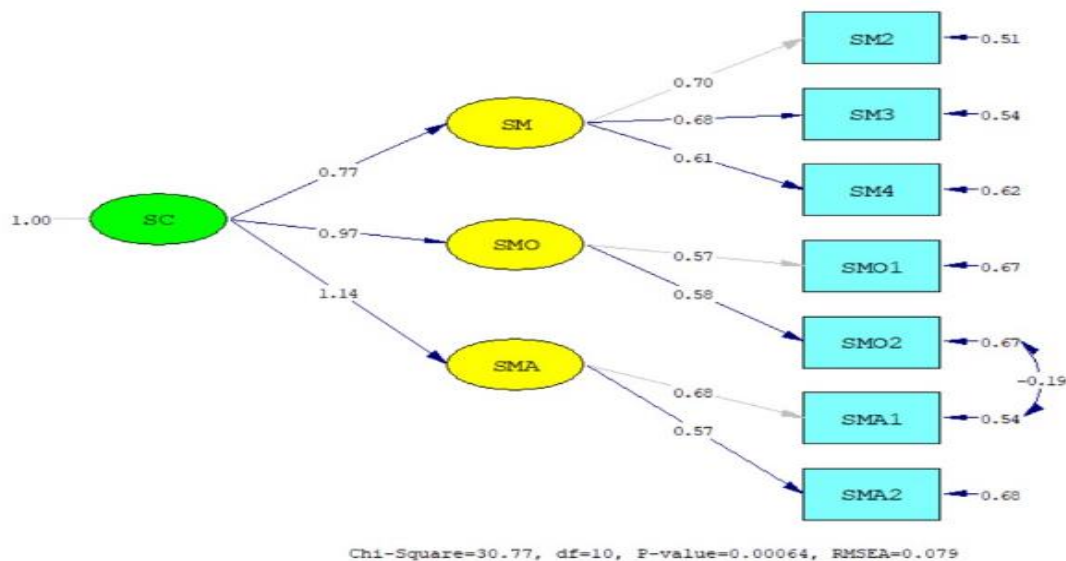
d. Measurement Reliability Test

A reliability test was conducted to determine the reliability of the measurement instrument. The Cronbach's Alpha test was used to calculate the reliability coefficient. The results of the reliability test showed that the Alpha value was 0.741. Thus, the Self-Care measurement instrument demonstrates high consistency and reliability when used to measure the concept of self-care.

Modern Analysis

a. Item Validity Test (CFA)

Table 7. Item Validity Test



Next, to determine the model fit indices, the researcher conducted a second-order analysis. Based on the results of the second-order analysis, the data shown in the figure above were obtained. Table 6 indicates that all fit indices meet the criteria. Therefore, it can be concluded that the self-care measurement model, consisting of three aspects self-maintenance, self-monitoring, and self-management is a good fit. This means that the variation in the sample data reflects the variation in the population data.

b. Instrument Validity (VE) and Instrument Reliability (CR)

Once the model fits, the next step is to calculate construct reliability and variance extracted using the following formulas:

Table 8. CR and VE

Rumus CR

$$\text{Construct Reliability} = \frac{(\sum \text{Standardized Loading})^2}{(\sum \text{Standardized Loading})^2 + (\sum \text{Measurement Error})}$$

Rumus VE

$$\text{Variance Extracted} = \frac{\sum \text{Standardized Loading}^2}{\sum \text{Standardized Loading}^2 + \sum \text{Measurement Error}}$$

The results of the construct reliability analysis showed a Construct Reliability (CR) value of 0.82 and a Variance Extracted (VE) value of 0.40. The CR value indicates that the instrument has good construct reliability.

1. Model Fit Measurement

Based on the three-factor structure proposed by EFA, Confirmatory Factor Analysis (CFA) was conducted to assess model fit. CFA tested whether the proposed model for the self-care instrument, consisting of three dimensions, was supported by the data. Model fit was evaluated using several common indices: RMSEA, NFI, NNFI, CFI, and IFI. This is shown in the table below:

Table 9. Model Fit Measurement

Fit Index	Fit Value	Criterion	Conclusion
Root Mean Square Error of Approximation (RMSEA)	0.079	< 0.08	Fit
Normed Fit Index (NFI)	0.96	> 0.90	Fit
Non-Normed Fit Index (NNFI)	0.95	> 0.90	Fit
Comparative Fit Index (CFI)	0.98	> 0.90	Fit
Incremental Fit Index (IFI)	0.98	> 0.90	Fit

Based on the results shown in Table 7, all model fit indices—RMSEA = 0.079, NFI = 0.96, NNFI = 0.95, CFI = 0.98, and IFI = 0.98—meet the generally accepted thresholds for good model fit. According to Hu and Bentler (1999) and Hair et al. (2010), a model is considered acceptable if the RMSEA is below 0.08 and the other indices (NFI, NNFI, CFI, IFI) are above 0.90. Therefore, it can be concluded that this self-care measurement is a good fit.

5. Convergent and Discriminant Validity Tests

To strengthen evidence of the instrument's validity, convergent and discriminant validity tests were conducted to assess its alignment with measures of the same construct and inverse relationships with measures of different constructs, respectively. These findings support the instrument's validity in measuring the phenomenon under study.

Table 10. Convergent and Discriminant Validity

	1	2	3	4	5	VE	CR
1. Self Compassion	1					0,51	0,91
2. Self Care	0,049	1				0,82	0,4
3. Mental Heath Literation	-.102*	-.622**	1			0,4	0,88
4. Self Neglec	-.205**	0,094	-0,015	1		0,62	0,94
5. Self Stigma Mental Illness	-0,014	-0,031	0,050	.082*	1	0,45	0,82
*. Correlation is significant at the 0.05 level (2-tailed).							
**. Correlation is significant at the 0.01 level (2-tailed).							

Pearson correlation analysis showed $r = 0.049$, indicating convergent validity through a positive but nonsignificant correlation between Self-Care and the Self-Compassion measure developed by Group 1, interpreted as very weak (0.01–0.25). It also showed $r = -0.622$, indicating discriminant validity through a significant negative correlation with the Mental Health Literacy measure developed by Group 3, $r = 0.094$ with the Self-Neglect measure developed by Group 4, and $r = -0.031$ with the Self-Stigma of Mental Illness measure developed by Group 5, indicating a very weak correlation.

The rationale for conducting convergent and discriminant validity tests involved four measurement instruments: self-compassion (VE 0.51, CR 0.91), mental health literacy (VE 0.40, CR 0.88), self-neglect (VE 0.62, CR 0.94), and self-stigma regarding mental illness (VE 0.45, CR 0.82). All CR and VE values met the criteria and minimum requirements for validity and reliability. This study aimed to construct and test the psychometric properties of the Self-Care Scale based on Riegel's Self-

Care of Chronic Illness theory. The instrument was constructed systematically through construct identification based on a theoretical review, blueprint and item development, readability testing, expert content validation, field testing, item analysis, reliability testing, and construct validity testing using Confirmatory Factor Analysis (CFA).

During the conceptualization stage, the measurement tool was developed based on Barbara Riegel's three main dimensions of self-care: self-maintenance, self-monitoring, and self-management. This theory was chosen because it emphasizes not only health-promoting behaviors but also the ability to monitor one's condition and make appropriate decisions in response to physical or psychological changes. Based on these dimensions, eight items were developed to represent self-care behaviors among college students. Content validity results showed that all items had Aiken's V scores above 0.50, ranging from 0.83 to 1.00, indicating that experts considered the items consistent with the measured indicators and that the development process successfully translated the theoretical concept into relevant and representative statements. Item discrimination results also showed corrected item-total correlations above 0.30 for all items, indicating that each item could distinguish between individuals with high and low self-care levels and was therefore suitable for inclusion in the instrument.

Multidimensional analysis showed that all three dimensions had strong correlations with the total self-care score, with self-maintenance showing the highest correlation ($r = 0.884$), followed by self-management ($r = 0.730$) and self-monitoring ($r = 0.640$). These results indicate that self-maintenance is the most dominant aspect in explaining the self-care construct among college students, as most self-care behaviors are manifested in daily health maintenance activities such as getting adequate rest, exercising, and maintaining physical condition rather than more complex health monitoring or decision-making activities. During construct validity testing using CFA, one item was found not to meet the factor loading criteria and was therefore eliminated from the measurement model. Item deletion is a standard procedure in instrument development to improve measurement model quality. After model modification, all remaining items had factor loadings above 0.50, and the model exhibited good fit indices (RMSEA = 0.079; NFI = 0.96; NNFI = 0.95; CFI = 0.98; IFI = 0.98), indicating that the proposed three-dimensional structure was consistent with the empirical data and supporting the construct validity of the measurement instrument.

The reliability results indicated adequate measurement quality, with Cronbach's Alpha = 0.741, indicating good internal consistency, and Construct Reliability (CR) = 0.82, indicating that the indicators can consistently measure the construct. However, the Variance Extracted (VE) = 0.40 remained below the ideal threshold of 0.50, suggesting significant error variance in some indicators. Nevertheless, the instrument is still considered acceptable because CR exceeds 0.70, even though VE has not reached 0.50. Convergent validity showed a very weak positive correlation between self-care and self-compassion ($r = 0.049$), with VE = 0.51 and CR = 0.91, indicating that self-compassion is not yet conceptually close enough to self-care and that support for convergent validity remains limited. In contrast, discriminant validity yielded better results: self-care showed a strong negative correlation with mental health literacy ($r = -0.622$), with VE = 0.40 and CR = 0.88, and very weak correlations with self-neglect ($r = 0.094$), with VE = 0.62 and CR = 0.94, and self-stigma regarding mental illness ($r = -0.031$), with VE = 0.45 and CR = 0.82. These results indicate that the self-care instrument can be distinguished from other psychological constructs, thereby supporting the discriminant validity of the measurement tool.

Compared with existing self-care measures, this instrument offers several advantages. The Self-Care of Chronic Illness Inventory (SC-CII) by Riegel primarily targets individuals with chronic illnesses and clinical populations, while the Exercise of Self-Care Agency Scale (ESCA), based on Orem's theory, focuses on self-care capacity. In contrast, this instrument was developed for students at UIN Sunan Gunung Djati Bandung, aligning with their developmental characteristics, academic

demands, and cultural context, while retaining Riegel's framework of self-maintenance, self-monitoring, and self-management for a comprehensive assessment of self-care. However, its limited items restrict indicator coverage, low convergent validity requires further testing with a more conceptually related measure, and the single-university sample limits generalizability

KESIMPULAN

This study developed and tested the psychometric properties of the Self-Care Scale based on Barbara Riegel's (2012) theory among students at UIN Sunan Gunung Djati Bandung. The instrument demonstrated adequate psychometric quality, with good content validity, satisfactory item discrimination, a factor structure aligned with the theoretical framework, and good construct reliability, representing self-care maintenance, self-care monitoring, and self-care management. Convergent validity showed a very weak, statistically nonsignificant relationship between self-care and self-compassion, providing limited empirical support, while discriminant validity indicated that self-care could be distinguished from other psychological constructs without substantial overlap. This study contributes to self-care measurement among Indonesian college students, an area that remains relatively limited, by providing an instrument grounded in Riegel's (2012) theory to enrich psychological measurement and serve as a foundation for further research on self-care, mental health, and psychological well-being. Limitations include the single-university sample and suboptimal convergent validity evidence; future research should use more diverse samples across regions, academic programs, and demographic characteristics and comparison variables with stronger conceptual relationships to self-care to strengthen validity evidence. With these refinements, the scale could achieve broader generalizability for psychological research and practice.

PERNYATAAN

Kontribusi Penulis: -

Pendanaan: Penelitian ini tidak menerima pendanaan eksternal.

Konflik Kepentingan: Para penulis menyatakan tidak terdapat konflik kepentingan.

Penggunaan Kecerdasan Artifisial: Kecerdasan artifisial atau AI generatif tidak digunakan dalam penyusunan artikel ini.

Persetujuan Etik dan Informed Consent: Tidak berlaku

Ketersediaan Data: -

Ucapan Terima Kasih: -

REFERENCES

- Arapı, A., Vellone, E., Ivziku, D., Duka, B., Taci, D., Notarnicola, I., Stievano, A., Prendi, E., Rocco, G., & De Maria, M. (2023). Psychometric Characteristics of the Self-Care of Chronic Illness Inventory in Older Adults Living in a Middle-Income Country. *International Journal of Environmental Research and Public Health*, 20(6). <https://doi.org/10.3390/ijerph20064714>
- Barbayannis, G., Bandari, M., Zheng, X., Baquerizo, H., Pecor, K. W., & Ming, X. (2022). Academic Stress and Mental Well-Being in College Students: Correlations, Affected Groups, and COVID-19. *Frontiers in Psychology*, 13(May), 1–10. <https://doi.org/10.3389/fpsyg.2022.886344>
- Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2024). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and

- best-practice recommendations. In *Asia Pacific Journal of Management* (Vol. 41, Number 2). Springer US. <https://doi.org/10.1007/s10490-023-09871-y>
- Fei, W., Jingqi, T., Xiaonan, S., Xinying, S., Jun, L., Xingxing, M., & Yibo, W. (2025). Design and development of scales in primary care: Practical steps and statistical methods. *Chinese General Practice Journal*, 2(4), 100091. <https://doi.org/10.1016/j.cgpj.2025.100091>
- Jafari, M. (2024). Can an Online Course, Life101: Mental and Physical Self-Care, Improve the Well-Being of College Students? *JMIR Medical Education*, 10, 1–8. <https://doi.org/10.2196/50111>
- Kania, N., Kusumah, Y. S., Dahlan, J. A., Nurlaelah, E., Gürbüz, F., & Bonyah, E. (2024). Constructing and providing content validity evidence through the Aiken's V index based on the experts' judgments of the instrument to measure mathematical problem-solving skills. *REID (Research and Evaluation in Education)*, 10(1), 64–79. <https://doi.org/10.21831/reid.v10i1.71032>
- Luciani, M., De Maria, M., Page, S. D., Barbaranelli, C., Ausili, D., & Riegel, B. (2022). Measuring self-care in the general adult population: development and psychometric testing of the Self-Care Inventory. *BMC Public Health*, 22(1), 1–10. <https://doi.org/10.1186/s12889-022-12913-7>
- Mokkink, L. B., Herbelet, S., Tuinman, P. R., & Terwee, C. B. (2025). Content validity: judging the relevance, comprehensiveness, and comprehensibility of an outcome measurement instrument – a COSMIN perspective. *Journal of Clinical Epidemiology*, 185, 111879. <https://doi.org/10.1016/j.jclinepi.2025.111879>
- Ranganathan, P., Caduff, C., & Frampton, C. M. A. (2024). Designing and validating a research questionnaire - Part 2. *Perspectives in Clinical Research*, 15(1), 42–45. https://doi.org/10.4103/picr.picr_318_23
- Riegel, B., Jaarsma, T., & Strömberg, A. (2025). An Update to the Middle-Range Theory of Self-Care of Chronic Illness. *Advances in Nursing Science*, 14–25. <https://doi.org/10.1097/ans.0000000000000594>
- Riegel, B., Westland, H., Iovino, P., Barelds, I., Bruins Slot, J., Stawnychy, M. A., Osokpo, O., Tarbi, E., Trappenburg, J. C. A., Vellone, E., Strömberg, A., & Jaarsma, T. (2021). Characteristics of self-care interventions for patients with a chronic condition: A scoping review. *International Journal of Nursing Studies*, 116, 103713. <https://doi.org/10.1016/j.ijnurstu.2020.103713>
- Schmitt, A., & Prasastyoga, B. (2024). Self-care practices and relationships with vitality and health complaints in self-employed workers. *Current Psychology*, 43(26), 22492–22507. <https://doi.org/10.1007/s12144-024-06014-4>
- Soto, N. Y. T., Lara, G. A. S., Ramírez, B. M., Baez, M. V. J., Torres, E. F. P., Baldenebro, A. L. C., & Manzanero, E. C. (2024). Design and validation of the multidimensional self-care scale in university students. *South Florida Journal of Development*, 5(8), e4220. <https://doi.org/10.46932/sfjdv5n8-004>
- Stefana, A., Damiani, S., Granziol, U., Provenzani, U., Solmi, M., Youngstrom, E. A., & Fusar-Poli, P. (2024). Psychological, psychiatric, and behavioral sciences measurement scales: best practice guidelines for their development and validation. *Frontiers in Psychology*, 15(January). <https://doi.org/10.3389/fpsyg.2024.1494261>
- Zhong, B., & Xie, L. (2023). Making “Joy Pie” to Stay Joyful: Self-Care Interventions Alleviate College Students' Mental Health Challenges. *International Journal of Environmental Research and Public Health*, 20(5). <https://doi.org/10.3390/ijerph20053823>