Cultural Adaptation, Reliability, And Validity Testing of the Indonesian Version of the Child and Youth Resilience Measure (CYRM) among Islamic Boarding School Students

Ulin Nihayah[1], Mungin Eddy Wibowo[2], Dwi Yuwono Puji Sugiharto[3], Ali Formen[4]
S3 Guidance and Counseling Education Study Program, Faculty of Education and Psychology, Universitas Negeri Semarang, Indonesia[1]
S3 Guidance and Counseling Education Study Program, Faculty of Education and Psychology, Universitas Negeri Semarang, Indonesia[2]
S3 Guidance and Counseling Education Study Program, Faculty of Education and Psychology, Universitas Negeri Semarang, Indonesia[3]
S3 Guidance and Counseling Education Study Program, Faculty of Education and Psychology, Universitas Negeri Semarang, Indonesia[4]
E-mail: ulinnihayah@students.unnes.ac.id[1], mungineddy@mail.unnes.ac.id[2], dypsugiharto@mail.unnes.ac.id[3], ali.formen@mail.unnes.ac.id[4]
Correspondent Author: Ulin Nihayah, ulinnihayah@students.unnes.ac.id
Doi: 10.31316/g-couns.v10i02.8473

Abstrack

This study aims to culturally adapt and evaluate the Indonesian version of the Child and Adolescent Resilience Measure (CYRM) among boarding school students. The adaptation followed standard guidelines, including forward and backward translation by linguists and expert panel reviews, to ensure cultural and linguistic relevance. A total of 362 students from four Islamic boarding schools in Central Java participated. Reliability testing showed strong internal consistency (Cronbach's alpha = 0.85) and composite reliability above the ≥0.70 standard. Construct validity was confirmed through exploratory and confirmatory factor analyses, supported by expert judgment on content validity. Model fit indices indicated excellent results (CFI = 0.937, RMSEA = 0.046, SRMR = 0.049). The CYRM structure comprises three dimensions Individual, Relational, and Contextual that capture personal capacity, social support, and cultural context in the face of challenges. Findings demonstrate that the Indonesian CYRM is a reliable and valid tool for measuring resilience, offering culturally appropriate support for research and interventions in Islamic boarding schools.
Keywords: resilience, santri, islamic boarding school, child and youth resilience measure (CYRM)

Abstrak

Penelitian ini bertujuan untuk mengadaptasi dan mengevaluasi versi Bahasa Indonesia dari Child and Adolescent Resilience Measure *(CYRM) di kalangan siswa pesantren secara kultural. Adaptasi ini mengikuti pedoman standar melalui penerjemahan maju-mundur oleh ahli bahasa dan tinjauan panel pakar untuk memastikan relevansi budaya dan linguistik. Sebanyak 362 siswa dari empat sekolah pesantren di Jawa Tengah berpartisipasi. Pengujian reliabilitas menunjukkan konsistensi internal yang kuat (alfa Cronbach = 0,85) dan reliabilitas komposit di atas standar ≥0,70. Validitas konstruk dikonfirmasi melalui analisis faktor eksploratif dan konfirmatif, didukung oleh penilaian pakar tentang validitas isi. Indeks kecocokan model menunjukkan hasil yang sangat baik (CFI = 0,937, RMSEA = 0,046, SRMR = 0,049). Struktur CYRM terdiri dari tiga dimensi Individu, Relasional, dan Kontekstual, yang menangkap kapasitas pribadi, dukungan sosial, dan konteks budaya dalam menghadapi tantangan. Temuan menunjukkan bahwa CYRM Indonesia merupakan alat yang andal dan valid untuk mengukur ketahanan, menawarkan dukungan yang sesuai secara budaya untuk penelitian dan intervensi di Pesantren*
Kata kunci: *ketahanan, santri, pondok pesantren,* child and youth resilience measure *(CYRM)*

Article info
Received August 2025, Revised September 2025, Accepted October 2025, Published December 2025

INTRODUCTION

Resilience is a psychological competence that is particularly important for adolescents facing complex pressures and challenges during puberty. This phase is characterized by significant biological, emotional, social, and cognitive changes; therefore, resilience skills are crucial for helping adolescents cope and adapt optimally. Research shows that resilience can improve adolescents' psychological functioning, enabling them to better cope with difficulties such as academic demands and social challenges (Guo & Liang, 2023; Li et al., 2024). . Involvement in physical activity has been shown to foster resilience, with physical exercise improving physical and psychological health and providing coping mechanisms for stress. Adolescents with high levels of resilience tend to face challenges with optimism, which reduces the likelihood of maladaptive behavior (ŞAHİN & Hepsöğütlü, 2018; Ningrum et al., 2022). A supportive parenting style also plays a role in strengthening resilience, developing self-acceptance and a sense of competence (Qiu et al., 2022). In addition, resilience can protect adolescents from negative psychological impacts such as depression and anxiety (Renati et al., 2023; Setyawati, 2021).

Students who study at Islamic boarding schools face various challenges, ranging from adapting to strict rules and boarding life to high academic and religious demands. This condition requires students to have resilience, namely the ability to survive, adapt, and rise from pressure or difficulties. Resilience is an essential protective factor in preventing the adverse effects of stress and supporting healthy psychological development. Students' ability to adapt positively to academic, social, and spiritual pressures in the pesantren environment reflects the central role of resilience as the primary psychological capital in the life of the Islamic boarding school. The pressure to comply with rules and routines can be seen in the ustadz's efforts to improve the discipline of worship (Lukman Septiansyah et al., 2023) and support overall discipline in learning (Abdullah & Kuncoro, 2024). This discipline, as emphasized by Nurwahyudin and Supriyanto (2021), is essential not only to support academic achievement but also the sustainability of daily life, especially in modern Islamic boarding schools that integrate various disciplines and demands for high concentration (Anaya et al., 2023). Students are also under academic pressure due to the demand to balance religious and general education, where reward and punishment methods can cause positive stress that supports character formation (Ulfah et al., 2018; Munir et al., 2023). The application of mindfulness in the daily lives of students can help them adapt to the existing rhythm and pressure (Hasna & Khasanah, 2023).

One widely used instrument is the Child and Youth Resilience Measure (CYRM) developed by Ungar (2005), which has demonstrated high validity and reliability across countries. The Child and Youth Resilience Measure (CYRM) is internationally recognized as a reliable and valid instrument for assessing the resilience of children and adolescents in various cultural and socio-economic contexts, with a multidimensional scope covering individual, relational, contextual, and cultural resources (Ghahremani et al., 2021; Windle et al., 2011)Measurement of resilience, as emphasized by Windle (2011), requires an understanding of its dynamic nature and the interaction of protective factors in various domains. Psychometric evaluations in different countries show the integrity of the CYRM, such as in the Persian version (Ghahremani et al., 2021) and the revised CYRM for adolescents (Aghebati et al., 2023), both of which have strong validity and reliability. Adaptations in India (Singh et al., 2022) and South Africa (Govender et

al., 2017) also confirm their internal consistency and construct validity. These cross-cultural findings confirm the role of CYRM in global resilience research and its application in designing positive interventions for adolescents, including in crises such as pandemics or disasters, due to its ability to measure resilience at the individual, family, and community levels (Masten, 2013; Panter-Brick et al., 2017; Wigley et al., 2021). However, until now there is no culturally adapted and psychometrically tested version of CYRM for the student population in Indonesia, especially in Islamic boarding schools. In fact, the pesantren environment has distinct cultural characteristics, values, and life patterns from public schools; therefore, it is necessary to adjust the language and context of the items to ensure that the instrument accurately measures resilience.

This study hypothesizes that the Child and Youth Resilience Measure (CYRM), adapted linguistically and culturally for the Indonesian context, will demonstrate adequate construct validity and high internal consistency among Islamic boarding school students. The purpose of this study is to develop a cultural adaptation of CYRM, assess its internal reliability, and evaluate the construct's validity through factor analysis. Theoretically, this study strengthens the empirical evidence that the Indonesian version of the CYRM can be used to measure student resilience and extends the application of resilience theory to the context of pesantren education. In practice, this study provides a culturally appropriate resilience measurement tool that helps educators and counselors assess students' resilience levels and supports the design of accurate, data-driven resilience-building programs.

METHOD

This study uses a quantitative research design with a psychometric approach to adapt culturally, test the reliability, and evaluate the validity of the construct of the Indonesian Child and Youth Resilience Measure (CYRM) version among pesantren students with boarding school criteria, have a supervisor or counselor, age 16-18 years, and are located in the Central Java region. Ghanad (2023) defines quantitative research as a systematic research effort that focuses primarily on the quantification of data and phenomena, including the collection and analysis of numerical data to identify patterns, relationships, and generalizations in populations. Data were collected over 3 months, with an average questionnaire completion time of approximately 15 minutes per respondent, which ensured the thorough participation of students at the four participating Islamic boarding schools and supported the validity and diversity of the data obtained. The instrument's adaptation was conducted by two linguists using the back-translation method, and the validation process was strengthened by expert tests conducted by two psychologists to ensure the instrument's relevance and cultural feasibility in the context of the pesantren. To handle missing or invalid data, deletions are performed based on the list of incomplete or invalid records, and double imputation replaces missing values with estimates derived from statistical analysis to ensure the quality and accuracy of the data used in this study. If the instrument is shown to be invalid (not measuring what it should measure) or unreliable (inconsistent in its measurement results), the data generated by the instrument will be discarded to preserve the validity of the research results.

`There were 362 students who participated in this study. All were students from four different Islamic educational institutions located in Central Java, Indonesia. They were from MAN 1 Pati (133 participants; 37%), SMK Nurul Barqi (95 participants; 26%), Pondok Pesantren Darul Muqorrobin (94 participants; 26%), and Sabilurrasyad Islamic

Boarding School (40 participants; 11%). The respondents consisted of 200 males (55%) and 162 females (45%). The sample was selected using purposive sampling, with the criterion of active students who had completed at least one year of education at the pesantren.

Table 1.
Participant Distribution

School	Frequency	Percentage
State Aliyah Madrasah 1 Pati	133	37%
Darul Muqorrobin Islamic Boarding School	94	26%
Sabilurrasyad Islamic Boarding School	40	11%
Nurul Barqi Vocational High School	95	26%
Gender		
Male	200	55%
Female	162	45%

Data analysis in this study was carried out using JASP version 0.17.3. which included internal reliability tests through Cronbach's alpha calculation and Composite Reliability (CR) with ≥ criteria of 0.70 (Hair et al., 2006), construct validity test through Exploratory Factor Analysis (EFA) using the Principal Axis Factoring extraction method with oblimin rotation (cut-off) factor loading ≥ 0.50) and Confirmatory Factor Analysis (CFA) with Maximum Likelihood estimation in the Structural Equation Modeling module (Hair et al., 2006). The suitability of the model was evaluated using an incremental fit index (CFI, TLI, IFI, RNI ≥ 0.90), an absolute fit index (RMSEA ≤ 0.08; ideal ≤ 0.05, SRMR ≤ 0.08, GFI ≥ 0.90, MFI ≥ 0.80), and parsimony index (PNFI ≥ 0.50) as recommended by Hu(1999) and Byrne (2016), as well as a sample size adequate with Hoelter's Critical N ≥ 200 (Hoelter, 1983). The convergent validity test was performed with an Average Variance Extracted (AVE) ≥ 0.50, while the discriminant validity was assessed through the comparison of the AVE root with the correlation between constructs (Fornell & Larcker, 1981).

RESULTS AND DISCUSSION

Results

The theory of resilience developed by Ungar (2012) served as the conceptual foundation for this study, which focused on measuring students' resilience in the boarding school environment. This theory is implemented through the culturally adjusted Child and Youth Resilience Measure (CYRM-28) framework developed by Redman-MacLaren et al. (2017). CYRM-28 views resilience as the result of interactions among individual resources, interpersonal relationships, and sociocultural contexts. In this study, these factors are grouped into three main dimensions. First, Individual, which includes Personal Skills, Peer Support, and Social Skills, represents personal capacity and peer support in overcoming challenges. Second, Relational, which encompasses Physical Caregiving and Psychological Caregiving as forms of physical and emotional support from the immediate environment. Third, Contextual, which includes Spiritual, Educational, and Cultural aspects, reflects the role of beliefs, education, and cultural values in shaping students' adaptability. This factor serves as a reference for implementing psychometric analysis,

ensuring that resilience measurement is relevant to the unique characteristics of Islamic boarding school students. This study examines the cultural adaptation, reliability, and validity of the Indonesian version of the CYRM among Islamic boarding school students. One important stage in the validation process is the goodness-of-fit analysis using Confirmatory Factor Analysis (CFA), which aims to ensure that the instrument's factor structure aligns with the empirical data obtained from the target population.

The results of the goodness-of-fit analysis indicated that the model provided an adequate fit to the data. The Comparative Fit Index (CFI) value is 0.937, the Tucker-Lewis Index (TLI) is 0.923, the Incremental Fit Index (IFI) is 0.939, and the Relative Noncentrality Index (RNI) is 0.937, all of which are above the minimum threshold of 0.90, indicating good fit. The Normed Fit Index (NFI) of 0.868 and the Relative Fit Index (RFI) of 0.838 indicate sufficient fit, although slightly below the ideal criterion of> 0.90. The Parsimony Normed Fit Index (PNFI) of 0.707 indicates an adequate level of model simplicity. Overall, these results confirm that the tested model has a good match, although the improvement of the model still makes it possible to improve some indices that have not yet reached optimal values

Table 2.
Model Fit Indices

Fit indices

Index	Value
Comparative Fit Index (CFI)	0.937
Tucker-Lewis Index (TLI)	0.923
Bentler-Bonett Non-normed Fit Index (NNFI)	0.923
Bentler-Bonett Normed Fit Index (NFI)	0.868
Parsimony Normed Fit Index (PNFI)	0.707
Bollen's Relative Fit Index (RFI)	0.838
Bollen's Incremental Fit Index (IFI)	0.939
Relative Noncentrality Index (RNI)	0.937

The results of the fit model test showed that the Root Mean Square Error of Approximation (RMSEA) value was 0.046, with a 90% confidence interval in the range of 0.037 to 0.054, and a p value of 0.791. This value is below the 0.05 threshold, indicating a very low rate of model approximation error. The Standardized Root Mean Square Residual (SRMR) of 0.049 was also below the criterion of 0.08, indicating minimal discrepancy between the model and data covariances. The Goodness-of-Fit Index (GFI) of 0.928 and the McDonald Fit Index (MFI) of 0.836 indicate a good model fit. Hoelter's Critical N values for $\alpha = 0.05$ (245.088) and $\alpha = 0.01$ (262.475) suggest that the sample size in this study is adequate to achieve a good fit. Meanwhile, the Expected Cross-Validation Index (ECVI) of 1.161 indicates that the model exhibits strong generalization performance across the broader population. Overall, these indicators confirm that the model used to validate the Indonesian version of the CYRM among Islamic boarding school students is highly compatible with empirical data.

Confirmatory Factor Analysis (CFA) shows that the model has an adequate level of match to the data. Major indices such as the Comparative Fit Index (CFI) of 0.937, the Tucker-Lewis Index (TLI) of 0.923, the Incremental Fit Index (IFI) of 0.939, and the Relative Noncentrality Index (RNI) of 0.937 are all above the minimum threshold of 0.90, indicating good fit. The Normed Fit Index (NFI) value of 0.868 and the Relative Fit Index (RFI) of 0.838 indicate a fairly good fit, although slightly below the ideal criterion (≥ 0.90). The Parsimony Normed Fit Index (PNFI) of 0.707 confirms that the model maintains an adequate level of simplicity.

The results of the absolute fit indices test also support this finding. The Root Mean Square Error of Approximation (RMSEA) value of 0.046 with a 90% confidence interval in the range of 0.037 to 0.054, and a p value of 0.791, indicates a very low model approximation error. The Standardized Root Mean Square Residual (SRMR) of 0.049 is below the 0.08 threshold, indicating minimal discrepancy between the model and data covariances. The Goodness-of-Fit Index (GFI) of 0.928 and the McDonald Fit Index (MFI) of 0.836 further support the model's suitability. In addition, Hoelter's Critical N values of 245.088 ($\alpha = 0.05$) and 262.475 ($\alpha = 0.01$) indicate adequate sample sizes to support a good fit. The Expected Cross-Validation Index (ECVI) of 1.161 means the model's potential to generalize fairly well to the broader population. The combination of results from incremental fit indices, absolute fit indices, and the parsimony index indicates that the Indonesian version of the CYRM model provides a good fit with the empirical data on Islamic boarding school students, with opportunities for minor improvement to enhance indices that have not yet reached their optimal values.

Experts consider the validation of the Indonesian version of the CYRM in the context of pesantren an essential contribution to the development of cross-cultural psychological instruments. According to psychometrics, the majority of fit indices (CFI = 0.937, TLI = 0.923, RMSEA = 0.046) confirm that the three-dimensional structure—Individual, Relational, and Contextual—is in line with the theory of resilience put forward by Ungar (2012), which is the result of the interaction between personal capacity, social relations, and cultural context. This corroborates the findings of Redman-MacLaren et al, (2017) that the CYRM-28 can be used across cultures while maintaining construct validity. The integration of spiritual and cultural dimensions in this model is a distinctive feature that is particularly relevant for students at Islamic boarding schools, where religious values and collective traditions play an essential role in the development of resilience (Suryatiningsih & Maryati, 2023). Thus, the Indonesian version of CYRM is not only scientifically valid, but also contextual according to the character of dormitory-based education

Developmental counseling experts emphasize that insignificant indicator paths are natural in the early stages of instrument adaptation. In line with Byrne (2016), sustainable development requires revising, deleting, or adding indicators to make instruments more sensitive to the typical dynamics of Islamic boarding schools, such as the role of kyais, communal parenting, and the internalization of ukhuwah. The Indonesian version of CYRM is a reliable and valid instrument for measuring student resilience. It has excellent potential for research, counseling interventions, and the development of pesantren curriculum based on strengthening adolescent resilience.

Table 3.
Statistical Summary and Interpretation of the Goodness-of-Fit Model

Indeks / Metric	Value Results	Criterion Cut-off	Interpretasi
Comparative Fit Index (CFI)	0,937	≥ 0,90 (good fit), ≥ 0,95 (excellent fit)	Good fit
Tucker-Lewis Index (TLI)	0,923	≥ 0,90 (good fit)	Good fit
Incremental Fit Index (IFI)	0,939	≥ 0,90 (good fit)	Good fit
Relative Noncentrality Index (RNI)	0,937	≥ 0,90 (good fit)	Good fit
Normed Fit Index (NFI)	0,868	≥ 0,90 (good fit)	Pretty good, a little subpar
Relative Fit Index (RFI)	0,838	≥ 0,90 (good fit)	Pretty good
Parsimony Normed Fit Index (PNFI)	0,707	≥ 0.50 (acceptable fit)	Adequate
Root Mean Square Error of Approximation (RMSEA)	0,046	≤ 0,05 (close fit), ≤ 0,08 (reasonable fit)	Close fit
RMSEA 90% CI	0,037 – 0,054	Interval ≤ 0,08	Meet
RMSEA p-value	0,791	≥ 0,05 (good fit)	Meet
Standardized Root Mean Square Residual (SRMR)	0,049	≤ 0,08 (good fit)	Good fit
Goodness of Fit Index (GFI)	0,928	≥ 0,90 (good fit)	Good fit
McDonald Fit Index (MFI)	0,836	≥ 0.80 (acceptable fit)	Adequate
Hoelter's Critical N (α = 0,05)	245,088	≥ 200	Adequate
Hoelter's Critical N (α = 0,01)	262,475	≥ 200	Adequate
Expected Cross Validation Index (ECVI)	1,161	Lower = better	Pretty good

The results of the Confirmatory Factor Analysis (CFA) indicate that most indicators in the Indonesian version of the CYRM make significant contributions to the resilience construct among students in the Islamic boarding school environment. Fit indices that meet or approach ideal criteria, such as CFI (0.937), TLI (0.923), IFI (0.939), and RMSEA (0.046), indicate a good fit with the empirical data. These findings reinforce Ungar's (2012) theory of resilience which emphasizes the importance of interactions between individual, relational, and contextual factors, as structured in CYRM-28 developed by Redman-MacLaren et al. (2017). The model's sustained fit indicates that the cultural adaptation implemented in the instrument has effectively preserved the relevance of the concept of resilience for students living in a dormitory-based educational context with strong religious values.

However, the study also found that some pathways were not statistically significant, including the associations with standardized estimates of −0.029 (p = 0.606) and −0.018 (p = 0.753). This insignificance suggests that some indicators may be less relevant or less sensitive for measuring students' resilience in the context of pesantren.

Contextual factors, such as differences in student backgrounds, variations in life experiences, and the degree of internalization of pesantren values, may be the cause. Methodologically, weak indicators can reduce the instrument's predictive power; therefore, further evaluation should be conducted by revising, deleting, or adding contextual items.

Factor	Indicator	Std. estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
INDV	Indv 1	0.643	0.039	16.618	< .001	0.567	0.719
	Indv 2	0.453	0.049	9.233	< .001	0.357	0.549
	Indv 3	0.578	0.044	13.275	< .001	0.492	0.663
	Indv 4	0.648	0.040	16.270	< .001	0.570	0.726
	Indv 5	0.588	0.043	13.528	< .001	0.503	0.673
	Indv 6	0.511	0.047	10.932	< .001	0.420	0.603
Rational 2	Rat 7	0.660	0.037	17.735	< .001	0.587	0.733
	Rat 8	0.597	0.041	14.582	< .001	0.517	0.677
	Rat 9	0.598	0.041	14.476	< .001	0.517	0.679
	Rat 10	0.550	0.044	12.537	< .001	0.464	0.636
	Rat 11	0.469	0.048	9.830	< .001	0.375	0.562
	Rat 12	0.602	0.041	14.796	< .001	0.522	0.682
	Rat 13	0.561	0.043	13.064	< .001	0.476	0.645
CNT	Cnt 14	0.493	0.045	10.985	< .001	0.405	0.581
	Cnt 15	0.506	0.044	11.403	< .001	0.419	0.593
	Cnt 16	0.503	0.044	11.398	< .001	0.416	0.589
	Cnt 17	0.473	0.046	10.330	< .001	0.383	0.562
	Cnt 18	0.490	0.045	10.952	< .001	0.402	0.578
	Cnt 19	0.564	0.041	13.727	< .001	0.483	0.644
	Cnt 20	0.572	0.040	14.134	< .001	0.493	0.651
	Cnt 21	0.556	0.041	13.486	< .001	0.475	0.637

Overall, these findings confirm that the Indonesian version of the CYRM has the potential to be a reliable and culturally relevant instrument for measuring resilience among students at Islamic boarding schools. However, the presence of weak pathways is a reminder that the development of psychological instruments is a dynamic process that requires continuous adjustment to provide accurate and meaningful results, both statistically and conceptually.

Some paths, such as −0.029 (p = 0.606; CI −0.140 to 0.082) and −0.018 (p = 0.753; CI −0.130 to 0.095), are not significant because the p-value is 0.05 and the confidence interval includes zero, indicating the absence of a statistically provable relationship. The consistency between the p-value and the confidence interval range supports the interpretation that the model generally exhibits a strong relationship between variables and is consistent with theoretical predictions. This pattern indicates that most indicators contribute substantially to the construct under study, supporting the model's reliability and validity.

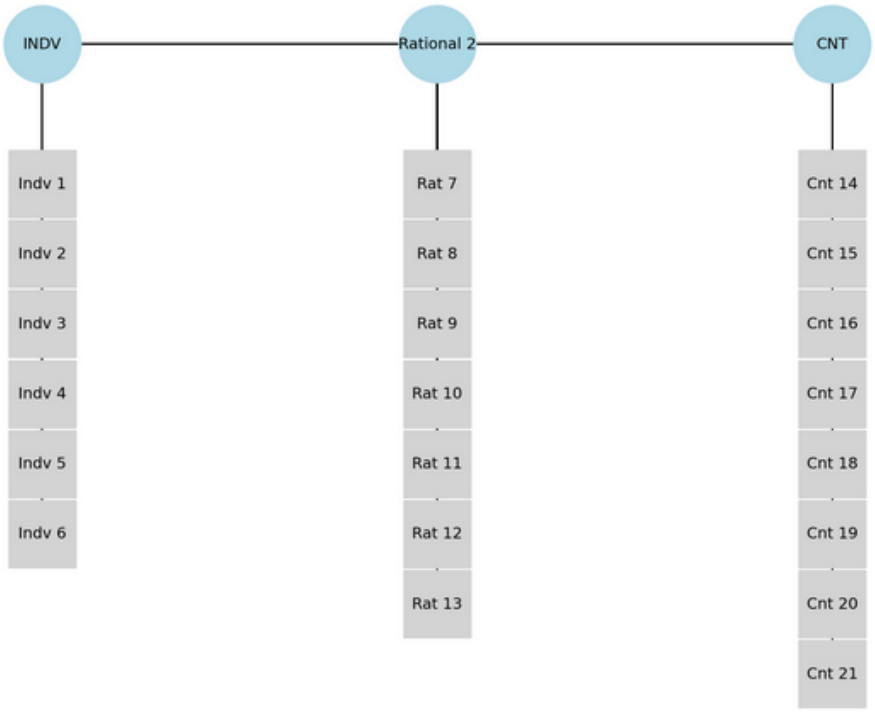

Figure 1. Path diagram SEM (CFA/measurement model).

The results of the Structural Equation Modeling (SEM) analysis showed that the research model consisted of three latent constructs, namely IND, Fc2, and CNT, each of which was measured through several observed indicators. IND constructs are measured by six indicators (CI2–CI11), Fc2 by eight indicators (CI12–CI19), and CNT by seven indicators (C20–C26), with a factor loading (λ) that is entirely positive and shows a significant contribution to the construct. These three latent constructs are positively correlated, indicating a mutually reinforcing relationship among them. The model also accounts for the error variance for each indicator and the residual covariance between conceptually related indicators. Overall, these results support the conclusion that the indicators used adequately represent latent constructs and the relationships among constructs, consistent with the research hypothesis.

Disucussion

Based on the results of this study, the cultural adaptation and validation of the Indonesian version of the Child and Youth Resilience Measure (CYRM) have produced a reliable and valid instrument for measuring resilience among Islamic boarding school students. Cronbach's alpha of 0.85 and composite reliability above 0.70 indicate strong internal consistency. At the same time, the CFA results support a three-dimensional structure of Individual, Relational, and Contextual, consistent with the theoretical framework of resilience proposed by Ungar (2012). The fit index of models such as CFI (0.937), RMSEA (0.046), and SRMR (0.049) met the good fit criteria, indicating that the measurement model is in accordance with empirical data and can represent the resilience construct in the context of pesantren.

Cultural adaptation, implemented through forward translation and expert panel review, has made this instrument culturally and contextually relevant for students. This is important given that the pesantren environment has unique characteristics such as an emphasis on spiritual values, collective discipline, and a dormitory lifestyle, which may not be adequately covered in general resilience instruments. The integration of spiritual and cultural dimensions into the Indonesian version of CYRM enriches the approach to measuring resilience, so that it not only reflects personal capacity and social support but also the role of religious beliefs and local values in shaping students' resilience.

Although most indicators show a significant contribution to the construct, some paths are not statistically significant, including the estimates of -0.029 (p=0.606) and -0.018 (p=0.753). These findings suggest that some items may be less sensitive or less relevant in the context of pesantren, thus requiring further evaluation. In the development of psychometric instruments, such inconsistency is common during the initial adaptation stage. It can serve as a basis for revising or improving items to better align with the dynamics of student life, such as the role of kiai, communal parenting, or the internalization of ukhuwah values.

This study aims to address the significant gap in culturally appropriate resilience assessment tools for Indonesian adolescents, particularly within the unique context of Islamic boarding schools (Borualogo & Jefferies, 2019). The rigorous daily schedules, constant peer interaction, and strict regulations inherent in these institutions pose distinct stressors that necessitate a tailored approach to measuring resilience (Hayatini & Dimyati, 2020). Thus, this research focuses on adapting and validating the Child and Youth Resilience Measure for this specific demographic, acknowledging that previous adaptations have primarily targeted broader Indonesian contexts (Borualogo & Jefferies, 2019).

Furthermore, existing Indonesian resilience measures often lack comprehensive cross-cultural validation processes, frequently omitting crucial steps such as backward translation, cognitive interviewing, and robust psychometric evaluations (Primasari et al., 2022). This study, therefore, seeks to rectify these limitations by undertaking a thorough psychometric assessment of the Indonesian Child and Youth Resilience Measure (Laksmita et al., 2018; Maylinda et al., 2024), ensuring its reliability and validity for use among Islamic boarding school students (Hayatini & Dimyati, 2020). This process involves evaluating aspects such as content validity, construct validity, and internal consistency, drawing upon established methodologies in scale development and adaptation (Hayatini & Dimyati, 2020).

The investigation will also explore the instrument's test-retest reliability to confirm its stability over time, a critical component for longitudinal studies and intervention efficacy assessments (Primasari et al., 2022). This comprehensive approach to validation ensures that the adapted measure accurately reflects the resilience construct within this specific cultural and educational setting, providing a robust tool for future research and intervention development (Borualogo & Jefferies, 2019). This is particularly crucial given the prior successful adaptation of the CYRM-R for broader Indonesian contexts, highlighting the importance of tailoring such tools to specific subpopulations (Borualogo & Jefferies, 2019).

Moreover, the development of specialized instruments, such as the resilience scale for Islamic boarding school students, is essential, as general measures may not adequately capture the unique challenges and protective factors prevalent in such environments

(Hayatini & Dimyati, 2020). This study builds on the understanding that resilience is a multifaceted construct that requires careful cultural consideration for accurate assessment, particularly in unique educational settings such as Islamic boarding schools (Langham et al., 2018). Such specific tools are vital for identifying factors that promote or hinder academic success, particularly given the dearth of research on academic resilience in challenging educational environments (Ahmed, 2024).

This ensures the tool's utility in identifying effective interventions tailored to the specific psychological and social dynamics prevalent in Islamic boarding schools, providing a more ecologically valid assessment of resilience (Borualogo & Jefferies, 2019; Chandra, 2025). This rigorous methodology will provide robust evidence for the psychometric properties of the adapted instrument, enabling its confident application in future research and clinical practice within this specialized setting (Verawati et al., 2022). The ultimate aim is to provide a reliable and valid tool to inform school programs and training to enhance student resilience in Islamic boarding schools (Hayatini & Dimyati, 2020). This is particularly important given that modifications, such as using a 5-point Likert response format, can significantly enhance the nuance and precision of assessments of school resilience, thereby capturing the intended information while minimizing ambiguity (Afzali & Hosseinian, 2024).

In practice, the availability of the Indonesian version of CYRM provides significant benefits for educators, counselors, and pesantren managers by enabling the objective identification of students' resilience levels. Instruments that have been tested for validity and reliability allow the preparation of data-based intervention programs, such as training in coping skills, strengthening social support, or integrating resilience materials into the pesantren curriculum. In addition, this tool can be used to monitor the longitudinal development of student resilience, enabling more targeted and practical efforts to strengthen mental resilience.

This research also contributes to the development of cross-cultural psychometric literature, especially in the context of religion-based education in Indonesia. The success of CYRM validation in the pesantren environment opens opportunities for broader applications, both in advanced research and in the development of educational policies that focus on students' psychological well-being. Although there is still room for improvement, these findings demonstrate that a systematic approach to cultural adaptation can produce an instrument that is not only scientifically valid but also contextually appropriate, making it suitable as a representative measure of resilience for the student population in Indonesia.

CONCLUSION

The present study affirms that the culturally adapted Indonesian version of the Child and Youth Resilience Measure (CYRM-28) provides a valid and contextually relevant framework for assessing the resilience of students in Islamic boarding schools, capturing the interplay between individual capacities, relational support, and socio-cultural contexts as outlined in Ungar's (2012) resilience theory. By demonstrating strong model fit across multiple indices and retaining the conceptual integrity of the original instrument, this research offers an essential contribution to resilience measurement in non-Western, religious-based educational settings. This area remains underrepresented in the literature. The findings are not only relevant to advancing psychometric validation in diverse cultural contexts but also have practical significance for educators, counselors,

and policymakers seeking to develop interventions that strengthen students' adaptive capacities. While the study identifies areas for refinement, particularly in enhancing the sensitivity of specific indicators, its results establish a strong foundation for future research and application, ensuring that resilience measurement in pesantren settings reflects both cultural specificity and theoretical rigor.

REFERENCES

Abdullah, M., & Kuncoro, M. P. (2024). Kegiatan ektrakurikuler lcd (language course departement) membangun disiplin bahasa arab santri pondok pesantren majelis tafsir Al Quran (MTA) Karanganyar. Al Ulya Jurnal Pendidikan Islam. https://doi.org/10.32665/alulya.v9i1.2725

Afzali, L., & Hosseinian, S. (2024). Development and validation of School Resilience Questionnaire (SRQ) in Iranian adolescents. BMC Psychology, 12(1). https://doi.org/10.1186/s40359-023-01496-6

Aghebati, A., Javaherirenani, R., Amin, R., Pazhooyan, M., Farahani, H., & Ahadianfard, P. (2023). Psychometric Properties of Persian Version of Child and Youth Resilience Measure-revised in Adolescents. Psychology in the Schools. https://doi.org/10.1002/pits.22860

Ahmed, MD. F. (2024). Bengali Translation and Validation of Academic Resilience Scale in Bangladeshi School-going Students. Research Square (Research Square). https://doi.org/10.21203/rs.3.rs-4848675/v1

Anaya, L. S., Faridi, F., & Khurin Maknin, N. A. (2023). Pendidikan Karakter Disiplin Santri Berbasis Tahfidzul Qur'an Di SMP 'Aisyiyah Boarding School Malang. Jurnal Ilmiah Profesi Pendidikan. https://doi.org/10.29303/jipp.v8i4.1611

Borualogo, I. S., & Jefferies, P. (2019). Adapting the Child and Youth Resilience Measure-Revised for Indonesian Contexts. Journal of Educational Health and Community Psychology, 8(4), 480. https://doi.org/10.12928/jehcp.v8i4.12962

Byrne, B. M. (2016). Structural Equation Modeling With AMOS. Routledge. https://doi.org/10.4324/9781315757421

Chiara Wigley, I. L., Mascheroni, E., Bulletti, F., & Bonichini, S. (2021). COPEWithME: The Role of Parental Ability to Support and Promote Child Resilient Behaviors During the COVID-19 Emergency. Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2021.732745

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research, 18(1), 39–50. https://doi.org/10.1177/002224378101800104

Ghahremani, S., Lavasani, F. F., Moinalghorabaei, M., Dehghani, M., & Farahani, H. (2021). The Psychometric Properties of the Persian Version of the Child and Youth Resilience Measure (CYRM-12). Iranian Journal of Psychiatry and Behavioral Sciences. https://doi.org/10.5812/ijpbs.114635

Ghanad, A. (2023). An Overview of Quantitative Research Methods. In International Journal of Multidisciplinary Research and Analysis. https://doi.org/10.47191/ijmra/v6-i8-52

Govender, K., Cowden, R. G., Asante, K. O., George, G., & Reardon, C. (2017). Validation of the Child and Youth Resilience Measure Among South African Adolescents. Plos One. https://doi.org/10.1371/journal.pone.0185815

Guo, L., & Liang, L. (2023). Physical Activity as a Causal Variable for Adolescent

Resilience Levels: A Cross-Lagged Analysis. Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2023.1095999

Hair, J. F. J., Black, W. C., Babin, B. J., & Anderson, R. E. (2006). Multivariate Data Analysis (Sixth Edition). In Gedrag & Organisatie (Vol. 19, Issue 3). https://doi.org/10.5117/2006.019.003.007

Hasna, A. N., & Khasanah, A. N. (2023). Mindfulness Pada Remaja Awal Santri Pondok Pesantren. Bandung Conference Series Psychology Science. https://doi.org/10.29313/bcsps.v3i1.5467

Hayatini, D. R., & Dimyati, D. (2020). Validity and Reliability of Resilience Scale for Islamic Boarding School Students. Humaniora, 11(3), 227. https://doi.org/10.21512/humaniora.v11i3.6693

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal, 6(1), 1–55. https://doi.org/10.1080/10705519909540118

Laksmita, O. D., Chang, P., Chung, M., & Liao, Y.-M. (2018). Psychometric Evaluation of Indonesian Version of Connor-Davidson Resilience Scale in Adolescent Survivors of Disaster (PST). Sigma's 29th International Nursing Research Congress. https://sigma.nursingrepository.org/handle/10755/16253

Langham, E., McCalman, J., Redman-MacLaren, M., Hunter, E., Wenitong, M., Britton, A., Rutherford, K., Saunders, V., Ungar, M., & Bainbridge, R. (2018). Validation and Factor Analysis of the Child and Youth Resilience Measure for Indigenous Australian Boarding School Students. Frontiers in Public Health, 6. https://doi.org/10.3389/fpubh.2018.00299

Li, N., Wang, D., Zhao, X., Li, Z. G., & Zhang, L. (2024). The Association Between Physical Exercise Behavior and Psychological Resilience of Teenagers: An Examination of the Chain Mediating Effect. Scientific Reports. https://doi.org/10.1038/s41598-024-60038-1

Lukman Septiansyah, M. A., Muhtadin, M. A., & Munir, M. S. (2023). Upaya Ustadz Dalam Meningkatkan Kedisiplinan Santri Di Pondok Modern Darul Hikmah Tulungagung. Efektor. https://doi.org/10.29407/e.v10i2.19466

Masten, A. S. (2013). Global Perspectives on Resilience in Children and Youth. Child Development. https://doi.org/10.1111/cdev.12205

Maylinda, R. N., Lubis, R., Lubis, R., Indrawan, Y. F., & Indrawan, Y. F. (2024). The Effectiveness of Resiliency Training on Academic Stress and Psychological Well-Being. Journal of Educational Health and Community Psychology, 13(1), 58. https://doi.org/10.12928/jehcp.v13i1.28326

Munir, K., Lubis, S. A., & Salim, S. (2023). Manajemen Konseling Dalam Membina Disiplin Belajar Santri Pondok Pesantren Shuffah Hizbullah Al Fatah Tanjung Pura Kabupaten Langkat. G-Couns Jurnal Bimbingan Dan Konseling. https://doi.org/10.31316/gcouns.v8i01.5008

Ningrum, D., Supriyadi, S., & Utami, F. B. (2022). Effects of Strength-Based Parenting on Adolescent's Resilience and Self-Esteem in Families Using Talents Mapping. Dialectical Literature and Educational Journal. https://doi.org/10.51714/dlejpancasakti.v7i2.87.pp.82-95

Nurwahyudin, N., & Supriyanto, S. (2021). Strategi Penanaman Karakter Disiplin Santri. Zawiyah Jurnal Pemikiran Islam. https://doi.org/10.31332/zjpi.v7i1.2757

Panter-Brick, C., Hadfield, K., Dajani, R., Eggerman, M., Ager, A., & Ungar, M. (2017). Resilience in Context: A Brief and Culturally Grounded Measure for Syrian Refugee and Jordanian Host-Community Adolescents. Child Development. https://doi.org/10.1111/cdev.12868

Primasari, I., Hoeboer, C. M., Bakker, A., & Olff, M. (2022). Validation of the Indonesian resilience evaluation scale in an undergraduate student population. BMC Public Health, 22(1). https://doi.org/10.1186/s12889-022-14769-3

Qiu, Z., Guo, Y., Wang, J., & Zhang, H. (2022). Associations of Parenting Style and Resilience With Depression and Anxiety Symptoms in Chinese Middle School Students. Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2022.897339

Redman-MacLaren, M., Klieve, H., McCalman, J., Russo, S., Rutherford, K., Wenitong, M., & Bainbridge, R. (2017). Measuring Resilience and Risk Factors for the Psychosocial Well-Being of Aboriginal and Torres Strait Islander Boarding School Students: Pilot Baseline Study Results. Frontiers in Education. https://doi.org/10.3389/feduc.2017.00005

Renati, R., Bonfiglio, N. S., & Rollo, D. (2023). Italian University Students' Resilience During the COVID-19 Lockdown—A Structural Equation Model About the Relationship Between Resilience, Emotion Regulation and Well-Being. European Journal of Investigation in Health Psychology and Education. https://doi.org/10.3390/ejihpe13020020

ŞAHİN, S., & Hepsöğütlü, Z. B. (2018). Psychological Resilience and Coping Strategies of High School Students Based on Certain Variables. Journal of Educational Sciences Research. https://doi.org/10.22521/jesr.2018.82.2

Setyawati, R. (2021). Protection Factors on Adolescent Mental Health Condition Due to Pandemic COVID-19. Proceedings Series on Social Sciences \& Humanities. https://doi.org/10.30595/pssh.v2i.91

Singh, K., Bandyopadhyay, S., & Raina, M. (2022). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) in India. Journal of Indian Association for Child and Adolescent Mental Health. https://doi.org/10.1177/09731342221141453

Suryatiningsih, & Maryati, L. I. (2023). Resilience, Religiousness and Psychological Well-Being in Santri [Resiliensi, Religiusitas dan Psychological Well-Being Pada Santri]. Universitas Muhammadiyah Sidoarjo, 1–10.

Ulfah, R., Aliyyah, R. R., & Pupu Fauziyah, R. S. (2018). Reward Dan Punishment Dalam Pembentukan Karakter Disiplin Santri. Tadbir Muwahhid. https://doi.org/10.30997/jtm.v2i2.1198

Ungar, M. (2005). Handbook for Working with Children and Youth: Pathways to Resilience across Cultures and Contexts. SAGE Publications, Inc. https://doi.org/10.4135/9781412976312

Ungar, M. (2012). Researching and Theorizing Resilience Across Cultures and Contexts. Preventive Medicine. https://doi.org/10.1016/j.ypmed.2012.07.021

Ungar, M., Ghazinour, M., & Richter, J. (2012). Annual Research Review: What Is Resilience Within the Social Ecology of Human Development? Journal of Child Psychology and Psychiatry. https://doi.org/10.1111/jcpp.12025

Verawati, N. N. S. P., Harjono, A., Wahyudi, W., & Gummah, S. (2022). Inquiry-Creative Learning Integrated with Ethnoscience: Efforts to Encourage Prospective Science Teachers' Critical Thinking in Indonesia. International Journal of Learning

Teaching and Educational Research, 21(9), 232. https://doi.org/10.26803/ijlter.21.9.13

Windle, G., Bennett, K., & Noyes, J. (2011). A Methodological Review of Resilience Measurement Scales. Health and Quality of Life Outcomes. https://doi.org/10.1186/1477-7525-9-8