

Psychometric Evaluation of the Meaning in Life Questionnaire in Islamic Boarding Schools

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Abstract

Meaning in life is an important psychological resource that contributes to adolescents' well-being, academic engagement, and positive development. However, empirical evidence regarding the psychometric properties of the Meaning in Life Questionnaire (MLQ) among students in Islamic boarding schools (pondok pesantren) remains limited. This study aimed to examine the construct validity and reliability of the MLQ in the context of Islamic boarding school education in Indonesia. A quantitative methodological design was employed involving 125 students aged 14–17 years from several Islamic boarding schools in Banjarnegara Regency, Central Java, Indonesia. Data were analyzed using Confirmatory Factor Analysis (CFA) with LISREL 8.80. The findings revealed that only one indicator met the recommended criterion for convergent validity ($\lambda = 0.51$; $t = 6.13$), whereas most indicators demonstrated relatively low factor loadings, and two indicators exhibited negative and non-significant loadings. Despite these limitations, the overall measurement model demonstrated an acceptable level of fit ($\chi^2 = 45.22$, $p = .12$, RMSEA = .049, GFI = .93, SRMR = .073). The findings suggest that the original MLQ does not fully capture the culturally embedded meaning of life among santri and requires further cultural adaptation and psychometric refinement.

Keywords: confirmatory factor analysis, construct validity, Islamic boarding school students, Meaning in Life Questionnaire

INTRODUCTION

Adolescence represents a critical developmental stage characterized by profound biological, cognitive, social, and emotional changes. During this period, individuals begin to construct their identities, develop personal value systems, and formulate future aspirations that shape their understanding of life purpose and meaning. From a developmental psychology perspective, the successful attainment of meaning in life is considered an essential indicator of healthy identity formation and optimal psychological well-being. Meaning in life refers to an individual's perception that life possesses purpose, coherence, and significance, enabling individuals to view their existence as valuable and direction-oriented (Martela & Steger, 2016). Conversely, a lack of meaning in life has been

associated with feelings of emptiness, a diminished sense of direction, lower psychological well-being, and increased vulnerability to psychological difficulties during adolescence (Nilsen et al., 2021).

Over the past decade, adolescent mental health has emerged as a major global concern due to the increasing prevalence of psychosocial problems among school-aged youth. Adolescents encounter numerous developmental challenges, including academic pressures, social expectations, uncertainty about the future, changes in interpersonal relationships, and the growing complexity of digital technology exposure. These circumstances may substantially influence adolescents' perceptions of meaning and purpose in life (Arslan et al., 2022). Empirical evidence from the United States indicates that adolescents with a stronger sense of meaning in life tend to report lower levels of depression and anxiety and demonstrate better psychosocial adjustment than those with lower levels of perceived meaning (L. A. King & Hicks, 2021). Similarly, studies conducted in China have revealed that meaning in life is positively associated with resilience, subjective well-being, and psychological adaptability during the developmental transition from adolescence to adulthood (Luo et al., 2022).

Meaning in life serves as a protective factor that enables individuals to cope with psychological distress and adapt more effectively to life changes and adversities. Individuals who report a stronger sense of meaning in life tend to exhibit better psychological well-being, more adaptive emotion regulation strategies, and greater resilience when facing stressful circumstances (Dezutter et al., 2014). A study conducted by (Trzebiński et al., 2024) during the COVID-19 pandemic demonstrated that meaning in life functions as a psychological resource that mitigates the adverse effects of stress and enhances individuals' capacity to endure and adapt during periods of crisis.

At the international level, research on the validity and reliability of meaning-in-life instruments has developed considerably. One of the most widely used instruments is the Meaning in Life Questionnaire (MLQ) developed by (Steger, 2012) and colleagues. (Naghiyae et al., 2020) reported that the MLQ demonstrated a stable two-factor structure consisting of Presence of Meaning and Search for Meaning, with satisfactory construct validity and reliability among individuals aged 20–80 years. Using Confirmatory Factor Analysis (CFA), the study showed that the measurement model achieved an adequate fit.

More recently, (Jovanović et al., 2025) evaluated the MLQ using Exploratory Structural Equation Modeling (ESEM) across five studies involving a total of 3,205 participants. Their findings demonstrated satisfactory structural validity, convergent validity, concurrent validity, and incremental validity. Furthermore, the instrument exhibited measurement invariance across gender and countries, indicating that the MLQ can be applied consistently across different populations. These findings suggest that contemporary psychometric validation extends beyond CFA and increasingly incorporates cross-group measurement invariance testing.

In contrast, studies examining the validity and reliability of meaning-in-life instruments among older adults in Indonesia remain limited. (Rahmawati & Yulia, 2023) developed a meaning-in-life scale for older adults using Exploratory Factor Analysis

(EFA). Their results showed that only four of the six initially proposed factors met the psychometric criteria. In addition, four out of 58 items were eliminated due to low content validity based on Aiken's V assessment. Although the instrument demonstrated satisfactory reliability, the study was limited to EFA and did not evaluate the measurement model using CFA or Structural Equation Modeling (SEM).

These findings indicate a methodological gap between international and Indonesian studies. International research has increasingly adopted advanced psychometric techniques, including CFA, Composite Reliability (CR), Average Variance Extracted (AVE), convergent validity, discriminant validity, and measurement invariance testing. In contrast, studies in Indonesia remain largely focused on content validity and EFA, resulting in less comprehensive empirical evidence regarding the psychometric quality of meaning-in-life instruments among older adults (Naghiyae et al., 2020; Rahmawati & Yulia, 2023).

Within educational settings, meaning in life has emerged as a critical psychological resource that contributes substantially to students' academic, social, and personal development. Individuals who perceive their lives as meaningful tend to demonstrate higher levels of academic motivation, stronger engagement in learning activities, better self-regulation, and clearer future aspirations. A meaningful sense of purpose enables adolescents to interpret educational experiences as part of broader life goals, thereby fostering persistence and commitment to academic achievement (Bronk, 2013; Yeager et al., 2014). Empirical evidence consistently indicates that adolescents with a well-defined sense of purpose exhibit greater optimism, higher life satisfaction, stronger academic engagement, and more adaptive psychosocial functioning than those who lack a clear life direction (Bronk, 2013; Burrow & Hill, 2011). Furthermore, meaning in life has been identified as a significant predictor of psychological well-being, life satisfaction, resilience, and adaptive coping across various developmental contexts (L. A. King & Hicks, 2021; Martela & Steger, 2016; Steger, 2012). These findings underscore the importance of meaning in life as a protective factor that facilitates positive youth development and psychological adjustment.

In the Indonesian context, meaning in life represents an increasingly important construct for understanding adolescent psychological development. Adolescents who report higher levels of meaning in life generally demonstrate better psychological well-being, stronger self-regulatory capacities, and greater resilience when facing academic challenges and everyday stressors. Meaning in life provides individuals with a sense of purpose, direction, and coherence that enables them to perceive their experiences as valuable and worthwhile. Consequently, meaning in life is increasingly recognized as a key psychological resource that supports optimal development across academic, social, emotional, and behavioral domains (L. A. King & Hicks, 2021; Martela & Steger, 2016).

Among educational institutions in Indonesia, Islamic boarding schools (*pondok pesantren*) offer a particularly distinctive context for the development of meaning in life. Unlike conventional educational settings that primarily emphasize academic achievement, *pesantren* integrate academic learning with religious instruction, character education, moral development, and spiritual cultivation. Such an educational

environment provides students with continuous opportunities to interpret life experiences through religious and transcendental frameworks. Religiosity and spirituality offer belief systems that help individuals understand purpose, value, and significance in life, thereby guiding behavioral choices and life decisions (P. E. King & Boyatzis, 2015; Park & Paloutzian, 2013). Within this context, santri are encouraged to perceive life not merely as a personal endeavor but as an expression of devotion to God and responsibility toward others. Consequently, the meaning systems developed within pesantren are likely to be characterized by strong transcendental and collectivistic orientations.

At the same time, life in Islamic boarding schools requires considerable psychological adaptation. Santri are expected to live independently, comply with strict institutional regulations, participate in highly structured academic and religious activities, and adapt to new social environments. These demands may influence students' psychological functioning while simultaneously shaping the processes through which they construct and maintain meaning in life. Previous studies have consistently demonstrated that religiosity and spirituality are positively associated with meaning in life, psychological well-being, and individuals' ability to cope effectively with life challenges (George & Park, 2017; L. A. King & Hicks, 2021; Park & Paloutzian, 2013). Therefore, investigating meaning in life among santri is particularly important because it offers insights into how religiously grounded educational experiences contribute to adolescents' psychological development and well-being.

One of the most widely used instruments for assessing meaning in life is the Meaning in Life Questionnaire (MLQ) developed by Steger and colleagues. The MLQ conceptualizes meaning in life through two complementary dimensions: *presence of meaning* and *search for meaning*. The *presence of meaning* dimension reflects the extent to which individuals perceive their lives as meaningful, purposeful, and valuable, whereas the *search for meaning* dimension represents individuals' active efforts to discover, deepen, and cultivate meaning in their lives (Steger et al., 2006). These dimensions are theoretically complementary because they capture both the subjective experience of possessing meaning and the ongoing process of seeking it. Such a conceptualization is particularly relevant during adolescence, a developmental period characterized by identity exploration, value formation, and the pursuit of life purpose (Martela & Steger, 2016).

A substantial body of research conducted across diverse cultural settings has demonstrated that the MLQ possesses satisfactory psychometric properties. Previous studies have reported stable factor structures, adequate construct validity, and strong reliability coefficients across various age groups and cultural backgrounds. Nevertheless, cross-cultural psychometric research has also revealed that factor structures, factor loadings, and reliability estimates may vary according to linguistic, cultural, educational, and social characteristics of the target population (Hallford et al., 2018). From a contemporary psychometric perspective, the validity and reliability of an instrument cannot be assumed when it is administered to populations that differ from those in which the instrument was originally developed. Differences in cultural values, educational

experiences, religious orientations, and social norms may substantially influence how respondents interpret questionnaire items and construct responses (Boateng et al., 2018).

Accordingly, rigorous psychometric evaluation is essential before an instrument can be confidently employed in research and psychological assessment practices. Validity refers to the degree to which empirical evidence and theoretical rationale support the interpretations of test scores for their intended purposes, whereas reliability concerns the consistency and stability of measurement outcomes across administrations and contexts (Furr, 2021). Establishing evidence of validity and reliability is therefore a fundamental prerequisite for ensuring accurate measurement and meaningful interpretation of research findings.

Although research on meaning in life has expanded considerably in Indonesia, studies specifically examining the validity and reliability of the *Meaning in Life Questionnaire* among students attending Islamic boarding schools remain limited. Most Indonesian studies have employed the MLQ to investigate the relationships between meaning in life and various psychological variables without providing comprehensive psychometric evidence regarding the suitability of the instrument within the *pesantren* educational context. This limitation is noteworthy because students in Islamic boarding schools possess distinctive characteristics, particularly in terms of religiosity, spirituality, social interaction patterns, and educational experiences grounded in religious values, all of which may influence their interpretation of items intended to measure meaning in life. The limited empirical evidence in this area highlights a significant research gap that warrants further investigation.

In light of these considerations, the present study addresses the following research questions: (1) Is the factor structure of the *Meaning in Life Questionnaire* appropriate for use among students in Islamic boarding schools? and (2) Does the instrument demonstrate adequate validity and reliability within the cultural and educational context of Islamic boarding schools in Indonesia? Addressing these questions is expected to contribute to the growing body of empirical evidence regarding the psychometric properties of the MLQ among Indonesian adolescents educated in religious-based educational settings. Furthermore, the findings are expected to provide a valid and reliable instrument for assessing meaning in life that can be utilized in psychological assessment, guidance and counseling services, and the development of interventions aimed at promoting psychological well-being and character development among students in Islamic boarding schools.

METHODS

Research Design

This study employed a quantitative approach using a methodological research design (*methodological research*) to examine the construct validity and reliability of the *Meaning in Life Questionnaire* (MLQ) among students enrolled in Islamic boarding schools (*pondok pesantren*) in Indonesia. A methodological research design was selected because it focuses on evaluating the psychometric properties of an instrument, including its factor structure, convergent validity, construct reliability, and model fit indices.

The psychometric evaluation of the instrument was conducted using *Confirmatory Factor Analysis* (CFA) to determine the extent to which the empirical data fit the theoretical structure of the *Meaning in Life Questionnaire* developed by (Steger et al., 2006). The MLQ comprises two dimensions: *Presence of Meaning*, which refers to the extent to which individuals perceive their lives as meaningful and purposeful, and *Search for Meaning*, which refers to the extent to which individuals actively seek and develop meaning in their lives. In addition, this study evaluated convergent validity, construct reliability, and several goodness-of-fit indices to determine the suitability of the instrument for assessing meaning in life among students in the Islamic boarding school context.

Population and Participants

The target population consisted of adolescent students enrolled in Islamic boarding schools (*pondok pesantren*) in Banjarnegara Regency, Central Java, Indonesia. The study involved 125 students recruited from several Islamic boarding schools that provide formal education at the senior secondary level, including *Madrasah Aliyah* (Islamic senior high schools) and vocational high schools (*Sekolah Menengah Kejuruan* [SMK]).

The selection of respondents was carried out using a purposive sampling technique, namely a sampling technique based on certain criteria that are in accordance with the research objectives (Creswell, 2019; Hirose & Creswell, 2023). All participants were between 14 and 17 years of age and were classified as middle adolescents. The inclusion criteria were as follows:

1. Being enrolled as a student and residing in an Islamic boarding school;
2. Being between 14 and 17 years old;
3. Having adequate proficiency in reading and understanding Indonesian; and
4. Providing voluntary assent to participate in the study and obtaining parental or guardian consent.

The sample size of 125 participants met the minimum recommendations for conducting Confirmatory Factor Analysis. (Hair et al., 2019) suggested that a sample size ranging from 100 to 200 respondents is generally adequate for relatively simple measurement models with a limited number of indicators. Similarly, (Kline, 2023) argued that samples exceeding 100 participants are sufficient for obtaining stable parameter estimates and acceptable statistical power in CFA.

Sampling Technique and Instrument Development

This study employed a purposive sampling technique in which participants were selected based on specific characteristics relevant to the research objectives. Participants

were recruited through collaboration with Islamic boarding school administrators in Banjarnegara Regency. This sampling approach was adopted because no comprehensive sampling frame is currently available that would permit the implementation of probability sampling among the *santri* population in the study area. Therefore, the findings should be interpreted with caution regarding their generalizability to the broader population of Islamic boarding school students in Indonesia.

The instrument used in this study was the *Meaning in Life Questionnaire* (MLQ) developed by (Steger et al., 2006). The questionnaire consists of ten items representing two dimensions:

1. Presence of Meaning (five items), which assesses the extent to which individuals perceive their lives as meaningful, purposeful, and valuable.
2. Search for Meaning (five items), which assesses the extent to which individuals actively seek and develop meaning in their lives.

The adaptation of the MLQ followed established guidelines for cross-cultural adaptation of psychological measures. The adaptation process consisted of four stages:

1. Forward translation, in which two independent bilingual translators translated the original English version into Indonesian;
2. Back translation, conducted by another bilingual translator to ensure semantic equivalence between the translated and original versions;
3. Expert review, performed by three psychology academics specializing in psychometrics, adolescent developmental psychology, and positive psychology; and
4. Readability testing, conducted with ten Islamic boarding school students who were not included in the main sample to evaluate linguistic clarity, cultural relevance, and comprehensibility of the questionnaire items.

Next, content validity was evaluated by three experts with expertise in psychology and psychometrics. Expert assessments were analyzed using the Aiken's V index (Aiken, 1985), with a value of ≥ 0.80 indicating good relevance of the item to the construct being measured (Azwar, 2022). The question items were tested for readability and explicability. The results of the Aiken readability test were 1 and the Aiken explicability test was 1. The MLQ uses a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores indicate higher levels of perceived meaning in life.

Research Procedure

Data collection was conducted on-site at participating Islamic boarding schools after obtaining permission from school principals and *pesantren* leaders. Before administering the questionnaire, participants received explanations regarding the objectives and significance of the study, the procedures for questionnaire completion, and their rights as research participants. The questionnaires were administered collectively in classrooms or meeting rooms and were completed independently by the students. The average completion time ranged from approximately 15 to 20 minutes. During the administration process, the researchers and trained research assistants

remained available to clarify items that participants found difficult to understand while ensuring that no guidance or influence was exerted on participants' responses.

Ethical Considerations

The study protocol was approved by teacher and students, because the participants were adolescents aged 14–17 years, both parental informed consent and adolescent assent were obtained before data collection. Participation was entirely voluntary, and participants were informed that they could withdraw from the study at any time without consequences. All responses were collected anonymously and were used exclusively for academic purposes. No personally identifiable information was recorded in the dataset. All research data were stored securely and could only be accessed by the research team to ensure confidentiality and participant privacy.

Data Analysis

Data were analyzed using LISREL version 8.80. Construct validity was examined through Confirmatory Factor Analysis (CFA). Model fit was evaluated using several goodness-of-fit indices, including Chi-square (χ^2), Root Mean Square Error of Approximation (RMSEA), Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR), and Root Mean Square Residual (RMR).

Convergent validity was assessed using standardized factor loadings and *t*-values. Items with standardized factor loadings of ≥ 0.50 and *t*-values of ≥ 1.96 were considered acceptable indicators of the latent construct. Construct reliability was evaluated using Composite Reliability (CR) and Average Variance Extracted (AVE), with minimum acceptable values of 0.70 and 0.50, respectively. If the initial measurement model did not satisfy the recommended psychometric criteria, model modifications were performed based on statistical evidence and theoretical considerations until an acceptable measurement model was achieved.

RESULTS AND DISCUSSION

1. Convergent Validity Evaluation

Convergent validity was assessed using Confirmatory Factor Analysis (CFA) by examining the standardized factor loading (standardized loading factor [SLF]), *t*-value, and coefficient of determination (R^2) for each indicator. According to (Hair et al., 2019), an indicator is considered to demonstrate adequate convergent validity when it has a standardized loading factor of at least 0.50 and a *t*-value greater than 1.96 at the 0.05 significance level. The results of the convergent validity analysis are presented in Table 1.

Table 1. Convergent Validity Evaluation

Indicator	Loading Factor (λ)	<i>t</i> - value	R^2
X1	0,20	3,26	0,13
X2	0,19	2,17	0,06
X3	0,28	3,18	0,12

Indicator	Loading Factor (λ)	t-value	R ²
X4	-0,006	0,057	0,00
X5	0,21	3,01	0,11
X6	0,17	2,40	0,07
X7	-0,027	-0,36	0,002
X8	0,51	6,13	0,50
X9	0,35	4,05	0,20
X10	0,33	3,09	0,11

The results of the Confirmatory Factor Analysis (CFA) indicated that only indicator X8 met the criterion for convergent validity, with a factor loading of 0.51 and a t-value of 6.13. In contrast, indicators X4 and X7 failed to reach statistical significance, with t-values of -0.057 and -0.36, respectively, and exhibited negative factor loadings. These findings suggest that both indicators were unable to adequately represent the latent construct of meaning in life.

The remaining indicators (X1, X2, X3, X5, X6, X9, and X10) yielded t-values greater than 1.96, indicating statistically significant relationships with the latent construct. However, their factor loadings remained below the recommended threshold of 0.50. According to (Hair et al., 2019), factor loadings below 0.50 indicate that the indicators explain only a limited proportion of the variance in the latent construct and that a substantial amount of variance is attributable to measurement error.

Therefore, although most indicators demonstrated statistically significant associations with the construct of meaning in life, the strength of these relationships remained relatively weak. Overall, the convergent validity of the Meaning in Life Questionnaire (MLQ) among students enrolled in Islamic boarding schools was not fully established. These findings suggest that most items require further evaluation through revision, elimination, or cultural adaptation to more accurately represent the construct of meaning in life within the context of Islamic boarding school students.

2. Model Fit Evaluation (Goodness of Fit)

The goodness-of-fit evaluation was conducted to determine the extent to which the proposed measurement model adequately represented the empirical data. Model fit was assessed using several goodness-of-fit indices, including the Chi-square statistic, p-value, Root Mean Square Error of Approximation (RMSEA), Root Mean Square Residual (RMR), Standardized Root Mean Square Residual (SRMR), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Normed Fit Index (NFI), Non-Normed Fit Index (NNFI/TLI), Comparative Fit Index (CFI), Incremental Fit Index (IFI), Relative Fit Index (RFI), Parsimony Normed Fit Index (PNFI), Parsimony Goodness-of-Fit Index (PGFI), and Critical N (CN). The results of the model fit evaluation are presented in Table 2.

Table 2. Model Fit Evaluation (Goodness of Fit)

Indeks Goodness of Fit	Value	Cut Off	Interpretation
Chi-Square	45,22	Smaller values indicate better fit	Fit

Indeks Goodness of Fit	Value	Cut Off	Interpretation
p-value	0,12	$\geq 0,05$	Fit
RMSEA	0,049	$\leq 0,08$	Fit
RMR	0,042	$\leq 0,05$	Fit
SRMR	0,073	$\leq 0,08$	Fit
GFI	0,93	$\geq 0,90$	Fit
AGFI	0,89	$\geq 0,90$	Fit
NFI	0,95	$\geq 0,90$	Fit
NNFI (TLI)	0,92	$\geq 0,90$	Fit
CFI	0,78	$\geq 0,90$	Fit
IFI	0,81	$\geq 0,90$	Fit
RFI	0,94	$\geq 0,90$	Fit
PNFI	0,43	$\geq 0,50$	Fit
PGFI	0,59	$\geq 0,50$	Fit
CN	147,36	≥ 200	Fit

As presented in Table 2, the measurement model demonstrated an acceptable level of fit with the empirical data. This conclusion is supported by the Chi-square value of 45.22 and the corresponding p -value of 0.12 ($p > 0.05$), indicating that the proposed model did not significantly differ from the observed covariance matrix. Moreover, the RMSEA value of 0.049, the RMR value of 0.042, and the SRMR value of 0.073 all met the recommended thresholds, suggesting relatively small residuals and an adequate representation of the observed data.

Among the absolute fit indices, the GFI value of 0.93 exceeded the recommended criterion of 0.90, indicating a satisfactory level of model fit. Although the AGFI value of 0.89 was slightly below the recommended threshold, it may still be considered indicative of a marginally acceptable fit. According to Kline (2023), it is not necessary for a measurement model to satisfy all fit indices simultaneously because each index is sensitive to different aspects of model complexity and sample size.

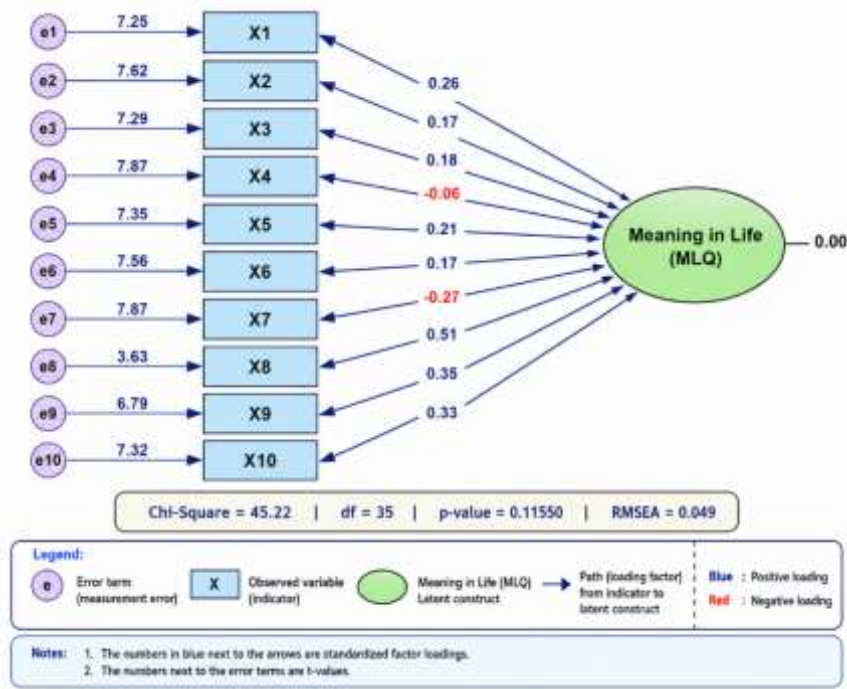
However, several incremental fit indices did not reach the recommended standards. Specifically, the values of NFI (0.95), NNFI/TLI (0.92), and RFI (0.94) were substantially the recommended cut-off value of 0.90. Furthermore, the CFI value of 0.78 and the IFI value of 0.81 indicated only a marginal level of fit. Regarding the parsimony-based indices, the PGFI value of 0.59 met the recommended criterion, whereas the PNFI value of 0.43 remained slightly below the suggested threshold. In addition, the CN value of 147.36 suggests that the sample size may have been insufficient to achieve greater model stability and stronger incremental fit.

Overall, the findings indicate that the measurement model of the *Meaning in Life Questionnaire* (MLQ) among students enrolled in Islamic boarding schools

demonstrated an acceptable or marginally acceptable level of fit. Although several incremental fit indices did not meet the recommended criteria, most of the absolute fit indices supported the adequacy of the proposed measurement model. Therefore, the model can be retained for subsequent analyses, while further refinement of indicators with low factor loadings is recommended to improve the psychometric quality and overall stability of the measurement model.

3. Path Diagram

Picture 1 presents the path diagram of the Confirmatory Factor Analysis (CFA) model for the Meaning in Life Questionnaire (MLQ). The diagram depicts the relationships between the latent construct and its observed indicators, including standardized factor loadings and measurement errors. The CFA model provides a graphical representation of the extent to which each item reflects the underlying construct of meaning in life among students enrolled in Islamic boarding schools (pondok pesantren) in Indonesia. This visual representation facilitates the interpretation of the measurement structure and enables the identification of indicators that contribute strongly or weakly to the latent construct.



Picture 1. Path Diagram of the CFA Measurement Model for the Meaning in Life Questionnaire (MLQ) among Students in Islamic Boarding Schools (Pondok Pesantren)

The findings of the present study indicate that the convergent validity of the *Meaning in Life Questionnaire* (MLQ) among students enrolled in Islamic boarding schools (*pondok pesantren*) has not been fully established. Based on the results of the Confirmatory Factor Analysis (CFA), only one indicator (X8) satisfied the recommended criterion for convergent validity, with a factor loading of 0.51 and a *t*-value of 6.13. Although eight additional indicators demonstrated statistically

significant *t*-values, their standardized factor loadings remained below the recommended threshold of 0.50. Furthermore, indicators X4 and X7 produced negative and non-significant loadings. These findings suggest that most of the items did not adequately represent the latent construct of meaning in life within the population of students attending Islamic boarding schools. According to (Hair et al., 2019), indicators with factor loadings below 0.50 indicate that a larger proportion of the item variance is attributable to measurement error rather than to the latent construct being assessed. Consequently, although several items maintained statistically significant associations with meaning in life, the magnitude of these relationships was relatively weak, and the evidence supporting convergent validity remained insufficient. From a psychometric perspective, this condition implies that the indicators may not fully correspond to the characteristics and experiences of the target population. Therefore, further evaluation of item relevance and cultural appropriateness is necessary.

The present findings differ from those reported in previous studies that demonstrated satisfactory psychometric properties of the MLQ in other cultural contexts. For example, (Chen & Gao, 2021) found that the MLQ retained a stable two-factor structure among Chinese adolescents and demonstrated adequate reliability and construct validity. Similarly, (Travezaño-Cabrera et al., 2022) reported that the MLQ exhibited satisfactory construct validity and reliability among Peruvian university students and maintained significant associations with psychological well-being. Furthermore, (Luo et al., 2022) demonstrated that the two-factor model of the MLQ remained stable across repeated measurements and showed satisfactory longitudinal measurement invariance among Chinese university students.

The discrepancy between the present findings and previous studies suggests that the psychometric properties of psychological instruments may vary across cultural settings. (Boateng et al., 2018) emphasized that instruments adapted for different populations require rigorous empirical evaluation because variations in language, cultural values, and life experiences may substantially influence the interpretation of questionnaire items. Likewise, (Hallford et al., 2018) argued that conceptualizations of meaning in life differ across cultures and that these differences may affect the functioning of measurement indicators.

Conceptually, meaning in life encompasses the dimensions of coherence, purpose, and significance (Martela & Steger, 2016). These dimensions emerge through interactions between individual experiences and sociocultural environments. Within Islamic boarding schools, meaning in life is likely to be understood in terms of religious devotion, obedience to Islamic teachings, and social contribution rather than merely personal achievement and self-actualization. (L. A. King & Hicks, 2021) concluded that perceptions of meaning in life are strongly shaped by individuals' value systems and existential beliefs.

The relatively weak contribution of several MLQ indicators observed in the present study may therefore reflect differences in the ways students in Islamic boarding schools conceptualize meaning in life. The MLQ was originally developed within the framework of Western positive psychology, which largely conceptualizes meaning in terms of individual fulfillment and personal goal attainment (Steger, 2012; Steger et al., 2006). In contrast, Islamic boarding schools emphasize collectivistic values, transcendental orientations, and spiritual development. Consequently, some MLQ items may not fully capture the forms of meaning that are most salient in the experiences of santri.

Another noteworthy finding was the presence of two non-significant indicators (X4 and X7), both of which exhibited negative factor loadings. (Kline, 2023) suggested that negative coefficients in CFA models may indicate problems associated with semantic ambiguity, reverse-worded statements, or a lack of correspondence between item content and respondents' cultural backgrounds. Similarly, (Suárez-Alvarez et al., 2018) reported that reverse-worded items frequently introduce response inconsistencies and increase measurement error, particularly among adolescent populations.

Developmental factors may also account for the limited convergent validity observed in this study. Adolescence represents a developmental period characterized by identity exploration and ongoing efforts to establish life purpose and existential meaning. (Bronk, 2013) emphasized that adolescents' perceptions of meaning in life remain dynamic because they are actively exploring personal values and future orientations. Likewise, (L. A. King & Hicks, 2021) noted that meaning and purpose are gradually integrated into a coherent self-concept throughout adolescence. Consequently, students may exhibit substantial variability in their responses to items measuring meaning in life, thereby weakening the relationships between observed indicators and the latent construct.

The relatively weak performance of the measurement model may also reflect the unique characteristics of meaning in life among students in Islamic boarding schools. Meaning in life within the pesantren environment is strongly embedded in religious teachings, spiritual practices, and collective values. Rather than being exclusively centered on personal achievement and self-realization, meaning in life is often interpreted as devotion to God, adherence to religious obligations, and the pursuit of social contribution and communal benefit. Consequently, the conceptualization of meaning in life among *santri* may differ substantially from the assumptions underlying the original MLQ, which was developed within the framework of Western positive psychology and predominantly individualistic cultural orientations.

Overall, the findings of the present study indicate that the *Meaning in Life Questionnaire* demonstrates an acceptable level of model fit among students attending Islamic boarding schools; however, the convergent validity of the construct has not been fully established. These findings suggest that meaning in life among *santri* is a culturally embedded construct that is strongly shaped by religious, spiritual, and sociocultural influences. Therefore, further instrument adaptation is warranted through revisions of item wording, the incorporation of indicators reflecting Islamic spirituality and devotion to God, and subsequent validation studies involving larger and more heterogeneous samples of Islamic boarding school students. Such efforts are expected to produce a culturally sensitive instrument with stronger validity and reliability, thereby providing a more accurate assessment of meaning in life among adolescents in Islamic educational settings

CONCLUSION

This study examined the construct validity and reliability of the Meaning in Life Questionnaire (MLQ) among students enrolled in Islamic boarding schools (pondok pesantren) in Indonesia. The findings indicate that, although the overall measurement model demonstrated an acceptable level of fit, the convergent validity of the instrument has not been fully established. These results suggest that the

original MLQ does not entirely capture the culturally embedded nature of meaning in life among pesantren students, whose understanding of life meaning is strongly influenced by religious, spiritual, and collectivistic values. Therefore, the MLQ requires further psychometric refinement and cultural adaptation before it can be considered a standardized instrument for assessing meaning in life in Islamic boarding school settings.

Future studies are recommended to refine the MLQ by revising problematic items and incorporating indicators that better represent Islamic spirituality, devotion to God, and collective responsibility. Subsequent research should also involve larger and more heterogeneous samples of pesantren students from different regions of Indonesia to further examine the validity, reliability, and measurement invariance of the instrument. Practically, the development of a culturally appropriate measure of meaning in life may provide a valuable assessment tool for counselors, educators, and mental health professionals in designing interventions aimed at promoting psychological well-being and positive character development among adolescents in Islamic boarding schools.

REFERENCES

- Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement*, 45(1), 131–142.
- Arslan, G., Yıldırım, M., Karataş, Z., Kabasakal, Z., & Kılınç, M. (2022). Meaningful living to promote complete mental health among university students in the context of the COVID-19 pandemic. *International Journal of Mental Health and Addiction*, 20(2), 930–942.
- Azwar, S. (2022). *Pengantar psikologi inteligensi*.
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quinonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: a primer. *Frontiers in Public Health*, 6, 149.
- Bronk, K. C. (2013). *Purpose in life: A critical component of optimal youth development*. Springer Science & Business Media.
- Burrow, A. L., & Hill, P. L. (2011). Purpose as a form of identity capital for positive youth adjustment. *Developmental Psychology*, 47(4), 1196.
- Chen, W., & Gao, R. (2021). A Generalizability Analysis of the Meaning in Life Questionnaire for Chinese Adolescents. 12(November), 1–6. <https://doi.org/10.3389/fpsyg.2021.687589>
- Creswell, J. W. (2019). *Research design: Pendekatan metode kualitatif, kuantitatif dan campuran*.
- Dezutter, J., Casalin, S., & Wachholtz, A. (2014). *Meaning in Life: An Important Factor for the Psychological Well-*. 58(4), 334–341. <https://doi.org/10.1037/a0034393>.Meaning
- Furr, R. M. (2021). *Psychometrics: an introduction*. SAGE publications.
- George, L. S., & Park, C. L. (2017). The multidimensional existential meaning scale: A tripartite approach to measuring meaning in life. *The Journal of Positive Psychology*, 12(6), 613–627.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis*.
- Hallford, D. J., Mellor, D., Cummins, R. A., & McCabe, M. P. (2018). Meaning in life in earlier and later older-adulthood: Confirmatory factor analysis and correlates of the meaning in life questionnaire. *Journal of Applied Gerontology*,

37(10), 1270–1294.

- Hirose, M., & Creswell, J. W. (2023). Applying Core Quality Criteria of Mixed Methods Research to an Empirical Study. *Journal of Mixed Methods Research*, 17(1), 12–28. <https://doi.org/10.1177/15586898221086346>
- Jovanović, V., Ilić, M., Šakan, D., & Brdar, I. (2025). The meaning in life questionnaire: revisiting the evidence of validity and measurement invariance using the exploratory structural equation modeling. *Assessment*, 32(8), 1274–1292.
- King, L. A., & Hicks, J. A. (2021). The science of meaning in life. *Annual Review of Psychology*, 72(1), 561–584.
- King, P. E., & Boyatzis, C. J. (2015). Religious and spiritual development. *Handbook of Child Psychology and Developmental Science*, 3, 975–1021.
- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.
- Luo, J., Tang, F.-C., Yang, R., Gong, J., Yao, C.-K., Huang, X., Chen, W., & Zhao, S.-Y. (2022). Longitudinal measurement invariance of the meaning in life questionnaire in Chinese college students. *Frontiers in Psychology*, 13, 1001548.
- Martela, F., & Steger, M. F. (2016). The three meanings of meaning in life: Distinguishing coherence, purpose, and significance. *The Journal of Positive Psychology*, 11(5), 531–545.
- Naghiyae, M., Bahmani, B., & Asgari, A. (2020). The psychometric properties of the meaning in life questionnaire (MLQ) in patients with life-threatening illnesses. *The Scientific World Journal*, 2020(1), 8361602.
- Nilsen, M., Stalsberg, R., Sand, K., Haugan, G., & Reidunsdatter, R. J. (2021). Meaning making for psychological adjustment and quality of life in older long-term breast cancer survivors. *Frontiers in Psychology*, 12, 734198.
- Park, C. L., & Paloutzian, R. F. (2013). *Directions for the future of the psychology of religion and spirituality: Research advances in methodology and meaning systems*. The Guilford Press.
- Rahmawati, N. D., & Yulia, C. (2023). Makna Hidup pada Lansia: Analisis Faktor Eksploratori Skala Makna Hidup. *JIIIP-Jurnal Ilmiah Ilmu Pendidikan*, 6(12), 9848–9852.
- Steger, M. F. (2012). Making meaning in life. *Psychological Inquiry*, 23(4), 381–385.
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53(1), 80.
- Suárez-Alvarez, J., Pedrosa, I., Lozano Fernández, L. M., García-Cueto, E., Cuesta, M., Muñiz, J., & others. (2018). *Using reversed items in Likert scales: A questionable practice*.
- Travezaño-Cabrera, A., Vilca, L. W., Quiroz-Becerra, J., Huerta, S. L., Delgado-Vallejos, R., & Caycho-Rodríguez, T. (2022). Meaning of life questionnaire (MLQ) in peruvian undergraduate students: study of its psychometric properties from the perspective of classical test theory (CTT). *BMC Psychology*, 10(1), 206.
- Trzebiński, J., Cabański, M., & Czarnecka, J. Z. (2024). Reaction to the COVID-19 pandemic: The influence of meaning in life, life satisfaction, and assumptions on world orderliness and positivity. In *Loss and Trauma in the COVID-19 Era* (pp. 44–57). Routledge.
- Yeager, D. S., Henderson, M. D., Paunesku, D., Walton, G. M., D'Mello, S., Spitzer,

B. J., & Duckworth, A. L. (2014). Boring but important: a self-transcendent purpose for learning fosters academic self-regulation. *Journal of Personality and Social Psychology*, 107(4), 559.