

Research Article

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Moral Leadership in Primary Education: Constructing and Validating an Instrument for Principal Assessment

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Abstract

Background/purpose. Moral leadership is essential to foster ethical, effective school management and create positive educational environments. Existing moral measurement instruments focus on general morality, and there is a lack of tools tailored to assess the moral leadership of prospective primary school principals in Indonesia. This study aims to develop and validate Bafadal's Leadership Morality Questionnaire (BLMQ) to measure the moral leadership qualities of prospective elementary school principals based on spiritual, national, and human morality aspects.

Materials/methods. The instrument development followed these steps: (i) content validity was assessed by two experts, (ii) a readability test was conducted with 100 respondent teachers, (iii) an assessment of the internal structure, and (iv) a reliability test involving 362 teachers from East Java, Indonesia, who were selected using multi-stage random sampling.

Results. Content validity, assessed by two experts, demonstrated perfect alignment between moral variables, aspects, competencies, and items, with an inter-rater agreement index of 1, requiring no item elimination. The practical evaluation highlighted exceptional usability, achieving a perfect Kappa index of 1.000 ($p < 0.01$). The readability test confirmed the instrument's clarity. Confirmatory Factor Analysis (CFA) validated the instrument's hierarchical structure, with the third-order model showing the best fit (e.g., RMSEA = 0.074, CFI = 0.915). Of the 65 items, 52 were validated with strong factor loadings (>0.5), while 13 items were excluded for enhancement. Reliability testing revealed high internal consistency, with Cronbach's Alpha and Composite Reliability exceeding 0.9 for most aspects. Norms established using percentile scores classified moral leadership into high (P75 and above), moderate (P50–P75), and low (below P50), providing a robust framework for assessment and intervention.

Conclusion. The validated BLMQ offers a reliable and comprehensive instrument for measuring moral leadership in prospective school principals, contributing to their leadership development, classification, screening, and placement in primary education.

1. Introduction

Primary education plays a crucial role in shaping students' foundational knowledge and character. The quality of primary education heavily relies on the effectiveness of school principals' leadership in managing and guiding schools. Research indicates that principals' leadership significantly impacts school management, organizational climate, teacher performance, and educational program development (Anastasiou & Papakonstantinou, 2015; Leithwood et al., 2008; Saaduddin et al., 2019; Valentine & Bowman, 1991; Želvys et al., 2019). Therefore, the success of elementary schools is often associated with the effective and morally upright leadership of principals.

Effective leadership depends not only on technical and managerial abilities but also on the morality of the leader. Moral leaders can bring positive change and inspire all organization members, whereas immoral leadership can cause serious problems, including corruption and abuse of power (Bafadal et al., 2020; Burhanuddin, 2017; Yukl & Gardner, 2020). A recent meta-analysis highlighted that transformational and transactional leadership significantly influence job satisfaction, which in turn impacts organizational performance (Giliç et al., 2024). This underscores the importance of principled leadership that enhances both satisfaction and performance in educational settings. Moreover, the role of school-based management (SBM) in enhancing educational quality has gained international attention. Research by Ishii and Ogawa (2024) on SBM in Senegal primary education demonstrated that parental and community participation positively influence student learning outcomes, such as reading scores (Ishii & Ogawa, 2024). This finding emphasizes the importance of participatory leadership models that foster community involvement for better educational results. In the context of crisis management, transformational leadership has proven vital. Transformational leadership during virtual teaching amidst the COVID-19 pandemic positively affected teachers' organizational citizenship behavior, mediated by job satisfaction (Sultoni, 2023). These insights highlight how effective leadership can mitigate challenges and maintain educational standards, even under difficult circumstances.

Cases of demoralization in the educational environment, such as sexual harassment and drug abuse by school principals, underscore the importance of strengthening morality in educational leadership (CNN-Indonesia, 2020; Fua, 2017; Kompas-TV, 2021). This situation highlights the urgent need to develop and implement moral-based leadership practices in schools. Moral leadership is vital in the educational context as it influences the quality of learning, student character formation, and the overall school culture (Bafadal et al., 2021a; Bass & Steidlmeier, 1999; Sergiovanni, 1992; Turan & Bektas, 2013). Thus, there is a necessity to measure and ensure the morality of school principals, particularly in the selection and assignment process of teachers as principals. By aligning leadership practices with moral values, schools can not only enhance educational outcomes but also create a culture that supports holistic development and societal well-being.

Measuring the morality of school principals is essential to ensure that prospective principals have high moral and ethical standards and the competence to lead schools effectively. Existing moral measurement instruments, such as the Moral Identity Scale by Aquino and Reed (2002) and the Moral Integrity Scale by Nunthawong et al. (2020), focus on constructs like moral symbolization, internalization, and adherence to ethical codes, catering to general populations such as students, professionals, and adults (Aquino & Reed, 2002; Nunthawong et al., 2020). However, their focus remains on general moral aspects and does not specifically address the unique moral leadership needs of school principals. While instruments like the Moral Foundations Questionnaire by Graham et al. (2011) and the Moral Competence Test by Biggs et al. (2015) explore broad constructs like moral relevance and developmental stages, their reliability metrics are relatively lower (Biggs et al., 2015; Graham et al., 2011). The Bafadal's Leadership Morality Questionnaire (BLMQ) addresses this gap by integrating targeted constructs relevant to educational leadership and achieving higher internal consistency, making it a more specialized and robust tool for assessing moral leadership in primary

education settings. Consequently, developing a specific instrument to measure the morality of prospective elementary school teachers as principals becomes a crucial step in ensuring that individuals selected to lead elementary schools in Indonesia are not only professionally capable but also have a strong moral foundation to build and maintain an ethical, fair, and high-quality educational environment.

2. Literature Review

2. 1. The Essence of Morality

Morality is a complex concept that has been the subject of debate for centuries. Various normative theories of morality have been developed, each with a different perspective on what constitutes morality. Morality is often considered a social control mechanism involving choices in dilemmas related to personal and social conflicts and requiring normative or value judgment (Falikowski, 1990; Lind, 2019). From a biological perspective, morality is seen as a human biological attribute for making moral judgments (Jones, 2019), while from a philosophical perspective, morality may stem from cultural or religious traditions (Ayala, 2012). Kohlberg's theory emphasizes the importance of fair decision-making and moral judgment (Kohlberg, 1964, 1971), while Gilligan added the concept of care to the moral discussion (Gilligan, 1982). Turiel and Schwartz define morality as prescriptive judgments about justice, rights, and welfare, as well as guiding principles of life (Schwartz, 2007; Turiel, 1983). Spector highlights the role of leaders in shaping the moral judgments of followers (Spector, 2019).

2. 2. Philosophical Views on Morality

Plato's (1976) moral theory emphasizes self-realization ethics and the concept of teleology. Aristotles (1984) highlighted rational capacity and argued that happiness was the ultimate goal of human behavior. Kant (1963) rejected the idea of relative morality and considered pure reason as the basis of morality. Bentham (1976) introduced utilitarianism, and Mill (1976) emphasized the importance of considering everyone's happiness in moral actions. Rawls (1971) developed a theory of justice that addresses social morality issues.

2. 3. Experts' Views on Moral Development

Freud (1923) introduced the concepts of id, ego, and super-ego in psychoanalysis, with the super-ego acting as a moral censor. Piaget (1932) presented stages of moral development, including heteronomous and autonomous morality. On the other hand, Kohlberg (1963) developed a six-stage theory of moral thought development, while Rest (1980) offered a social justice perspective on morality, with four components of moral action: moral sensitivity, moral judgment, moral motivation, and moral character. More recently, Lind (2019) stated that moral competence was the ability to resolve conflicts between opposing moral concerns.

2. 4. Morality in School Leadership

Morality-based leadership is defined as the ability of school principals to direct, coordinate, and mobilize learning practices based on certain teachings or values, consistently adhering to societal norms and ethics (Bafadal et al., 2021b). This type of leadership focuses on the teaching-learning process and minimizes time for administrative or managerial tasks (Brewster & Klump, 2005). Effective school leadership is crucial in developing teacher professionalism and competence, thereby enhancing educational quality (Brauckmann et al., 2016; Hallinger et al., 2020). Moral leadership involves evaluating actions based on their goodness or badness, measured through the values contained in those actions. It requires consideration of ends (goals), consistency with moral standards (means), and consequences for oneself and others (outcomes) of a decision or action (Yukl & Gardner, 2020). Three elements of moral leadership identified in exemplary schools include spiritual

morality, national morality, and humanity morality (Bafadal et al., 2021b). 1) Spiritual Morality involves integrating religious and philosophical values into educational practices. It is embedded in the school's vision and mission and forms the basis of the principal's leadership approach. This morality includes virtues such as beneficence, patience, practical wisdom, and forgiveness (Arifin, 2015; Keller, 2000). Spirituality often relates to beliefs and practices based on the transcendent dimension of life, significantly influencing moral priorities and reasoning (Peterson & Seligman, 2004; Narvaez & Rest, 1995). 2) National Morality emphasizes democratic values, national insight, national resilience, and understanding the rights and obligations of citizens. It is reflected in the curriculum, school culture, and artifacts displayed, promoting national identity and responsibility (Canetti et al., 2014; Gumuruh & Adinata, 2020; Risnain et al., 2021; Sunandar et al., 2022). 3) Humanity Morality relates to respecting and caring for others, emphasizing multiculturalism in education. This aspect involves recognizing equality, appreciation, respect, empathy, and care for others, which is essential in creating an inclusive and caring educational environment (Danopoulos, 2017; Durgun Ozan et al., 2020; Roland, 2014).

2. 5. Measuring Morality

Measuring morality in psychology is a complex process involving various methods and instruments to evaluate individuals' moral judgments and ethical behavior. According to Cronbach (1990), there are two main classifications in psychological measurement: maximum performance measurement and typical response measurement. Maximum Performance Measurement aims to assess an individual's maximum capacity. In the context of morality, this involves assessing the extent to which individuals can make moral decisions and judgments in various situations. Maximum performance tests typically have a clear structure and specific instructions, with responses that can be evaluated as correct or incorrect. These tests are often used to measure intelligence, learning achievement, talent, proficiency, and other cognitive abilities, including moral judgment capability (Kohlberg, 1964). Psychological instruments, both in maximum performance and typical response measurements, serve as objective and standard tools for measuring behavior samples (Caine, 1976). The behaviors measured can be overt (observable activities) or covert (internal processes not directly visible). These instruments may include ability tests designed to measure skills, knowledge, or other cognitive functions (Urbina, 2014). In the context of morality, it is important to develop measurement procedures that accurately capture the cognitive and behavioral aspects of individual morality. This includes individuals' ability to make moral judgments and decisions, which are important cognitive aspects of morality (Kohlberg, 1964).

3. Methodology

The validation process for Bafadal's Leadership Morality Questionnaire (BLMQ) in the context of this study, conducted in Indonesia, particularly in East Java, encompassed four primary phases as outlined by Hinkin (2005): (i) the content validity assessment was conducted from February 22, 2023, to April 10, 2023, by two experts: Prof. Dr. Bambang Budi Wiyono and Dr. Juharyanto; (ii) the readability test was carried out with 100 respondent teachers who were prospective school principals from May 2, 2023, to May 23, 2023; (iii) the assessment of the internal structure was carried out, and (iv) the reliability test was conducted simultaneously from June 20, 2023, to December 20, 2023, involving 362 respondent teachers who were prospective school principals in East Java Province, Indonesia. It is important to note that these elements should not be viewed as distinct categories of validity but rather as different types of evidence that collectively contribute to the comprehensive assessment of the tool's validity (Hinkin, 2005). In the context of this research, for BLMQ to be recognized as an effective means of assessing leadership morality, the scores generated by BLMQ were designed to facilitate insightful interpretations of the participants' progress in their understanding of leadership morality.

3. 1. Participants

In this study, the availability sampling method was employed, involving two distinct groups of participants. Group one, which contributed to the preliminary content validation of BLMQ in the first phase of the research, consisted of two seasoned experts. Each of these experts boasts over a decade of experience in leadership morality, educational research, and assessment and holds either a doctoral or professorial title in the field of education. It is essential to note that both experts are not part of the research team, ensuring that potential bias from their involvement is minimized.

The second participant group included 362 teachers, all of whom were selected based on the qualifications outlined for prospective principals in the regulation of the Minister of Education, Culture, Research, and Technology number 40 of 2021 regarding teacher appointments as school principals. This regulation sets forth stringent criteria such as academic credentials, teaching and Teacher Mover Certificates, rank, role, performance evaluation, managerial skills, and physical and mental health, among others (Maisyaroh et al., 2023). A total of 362 teachers from various cities and districts in East Java, Indonesia, were selected using multi-stage random sampling. The sampling process started with clustering based on the 29 districts and nine cities within the province, followed by stratification according to educational levels (Bachelor's and Master's degrees) and age groups (<30 years, 31–40 years, 41–50 years, and 51–60 years). Further details can be found in Appendix A.

Every participant was given a consent form paired with an informational sheet, clearly communicating that: (1) their participation in the study was entirely voluntary, (2) they could choose to exit the research at any point without any negative consequences and without needing to provide a reason for leaving, and (3) all gathered data would be handled with anonymity, ensuring no individual could be recognized. Access to the schools was granted by the East Java provincial government and the city/regional governments in the East Java province through the Unity and Politics Agency, and the Department of Education in March-August 2023. The BLMQ was sent via postal delivery to 581 teachers, but only 362 teachers participated in this research. Thus, the response rate was 62.3%.

3. 2. Item Statements

After a comprehensive review of the literature concerning instruments assessing leadership morality, it was decided to maintain the utilization of moral dilemmas as fundamental queries (referred to as "quick" questions) within the BLMQ. Initially, a considerable number of items were crafted to ensure clear distinctions across Kohlberg's three stages of moral development: pre-conventional, conventional, and post-conventional. The use of moral dilemmas, which place individuals in complex situations requiring choices between conflicting moral principles, is a customary approach in ethical studies (Christensen et al., 2014). Notably, most tools used to assess moral decisions rely entirely or partly on moral dilemmas as their starting point. While some critics contend that moral dilemmas might be artificial and not truly reflective of moral judgments, this concern can be addressed by designing more relatable and realistic dilemmas. Responses to hypothetical dilemmas have meaningful implications for the emotional and cognitive aspects of real-life decision-making (Bostyn et al., 2018).

The development of the BLMQ consists of 65 items, with moral dilemmas designed to encompass aspects of spiritual, national, and human morality, following the classification outlined by Bafadal et al. (Appendix B). These elements were chosen based on their relevance to the intended audience. The dilemmas were crafted to be both recognizable and plausible to the target respondents to overcome the challenges often related to the artificial or "contrived" nature of such ethical quandaries.

3.3. Response Format

The decision to use rankings as the response format was driven by the need to have respondents organize items according to a specific attribute, such as moral judgment, in the context of BLMQ. Scholars engaged in value research have repeatedly endorsed the ranking method due to its suitability in reflecting the comparative aspects inherent in values, allowing individuals to express their preferences concerning others (Roccas et al., 2017).

Describing the act of ordering values by personal importance as a commonly accepted best practice for revealing an individual's value structure. With the BLMQ's design grounded in Kohlberg's stage-based model (where progression occurs through distinct stages) and given that it does not seek to evaluate teachers' leadership morality judgments precisely, the discussed considerations will not be problematic. Rankings can be complex and demanding, requiring considerable mental effort and focus (Alwin & Krosnick, 1985); measures were taken to simplify the process within BLMQ's ranking options. The creation of items utilized straightforward language and concise narratives, aiming to reduce any unrelated fluctuations in responses.

Extensive research on various approaches to evaluating moral judgment guided the meticulous choice of the response format. Participants are initially exposed to a moral dilemma and subsequently asked to make a decision by selecting one of the provided "action" choices (see Figure 1). Each of these options aligns with one of Kohlberg's fundamental stages of moral development.

Story #1

The head of the school is faced with a moral dilemma regarding maintaining a consistent attitude in enforcing discipline at school. A student was caught bringing a cellphone to school, which is against the set regulations. However, this student is the child of an influential official in the education department. The school head is torn between enforcing the same punishment as other students or giving special treatment to maintain ties with the education official.

1. How should the school head handle this situation to maintain consistency in discipline enforcement?

- a) Give the student the same punishment as other students
- b) Ignore the student's violation
- c) Give the student a lighter punishment
- d) Ask the education official to intervene

Story #9

The school head is faced with a moral dilemma concerning equality among students. The school he leads has a diverse student population in terms of intellectual abilities, socio-economic backgrounds, and special needs. While he wants to ensure that every student has the same opportunities for success, he also recognizes that achieving true equality might require providing different levels of support to students with special needs. He must decide how to create a fair and inclusive environment in the school.

41. What should the school head do in the face of this moral dilemma?

- a) Provide the same support to all students.
- b) Recognize individual differences and offer support tailored to the needs of each student.
- c) Focus only on students with special needs.
- d) Close the current school and open a special school.

Figure 1. Sample scenario with narrative and associated choices.

3.4. Item Scoring

The BLMQ is designed to assess the morality of leadership according to moral actions, evaluating action responses according to Kohlberg's stages of morality. The BLMQ score for each item ranges from 1 to 4.

Table 1. Scoring Matrix.

Level	Stage	Score
Pre-conventional	1. Obedience and punishment	1
	2. Self-interest	1 or 2
Conventional	3. Interpersonal accord and conformity	2 or 3
	4. Authority and maintaining social order	3
Post-conventional	5. Social contract	3 or 4
	6. Universal ethical principles	4

Each item has four answer choices, each consisting of these levels: pre-conventional, conventional, and post-conventional. We added one more answer choice from these stages: level of obedience and punishment, self-interest, harmony, and interpersonal compatibility, authority and maintaining social order, social contract, and universal ethical principles, so there were four answer choices with different levels.

4. Results

4. 1. Content Validity

Two experts, Prof. Dr. Bambang Budi Wiyono (Expert Judge #1) and Dr. Juharyanto (Expert Judge #2), evaluated the content validity of the instrument measuring the morality of prospective primary school principal leadership. They assessed the alignment between variables, moral aspects, and moral competencies with the items in the instrument. The evaluation results showed a high agreement between the experts, with most items rated as highly relevant (Appendix C).

		EXPERT OPINION 1	
		Low Relevance (1-2)	High Relevance (3-4)
EXPERT OPINION 2	Low Relevance (1-2)	0	0
	High Relevance (3-4)	0	65

Using the following formula, the inter-rater agreement method quantified the experts' evaluations, yielding an expert test index:

$$\frac{D}{A + B + C + D} = \frac{65}{0 + 0 + 0 + 65} = \frac{65}{65} = 1$$

An index of 1 was obtained, indicating perfect agreement among the experts. Consequently, the instrument is considered to have high content validity, requiring no item elimination.

4. 2. Practical Evaluation

The same experts evaluated the practicality of the instrument. The aspects assessed included the completeness of the manual, ease of administration, clarity of instructions, data processing procedures, and interpretation of measurement results. The evaluation indicated that the instrument is easy to administer and understand (Appendix D).

Table 2. Kappa Symmetric Measures.

		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Measure of Agreement	Kappa	1.000	.000	2.646	.008
N of Valid Cases		7			

Using the Kappa index, the researcher determined the practicality and suitability of the instrument. The results showed perfect agreement between the experts, with a Kappa value of 1.000, statistically significant at a level of less than 0.01.

4. 3. Readability Testing

A readability assessment was conducted with the involvement of 362 teachers to ensure the instrument's comprehensibility. Aspects evaluated included understanding of the instructions, language, sentences, and answer options. The majority of teachers found the instrument easy to understand (Appendix E).

4. 4. Confirmatory Factor Analysis (CFA)

The researcher conducted a confirmatory factor analysis to test the moral aspects and competencies of the instrument. The analysis was performed at three levels: first order, second order, and third order. Figures 2, 3, and 4 show the analysis results for each level.

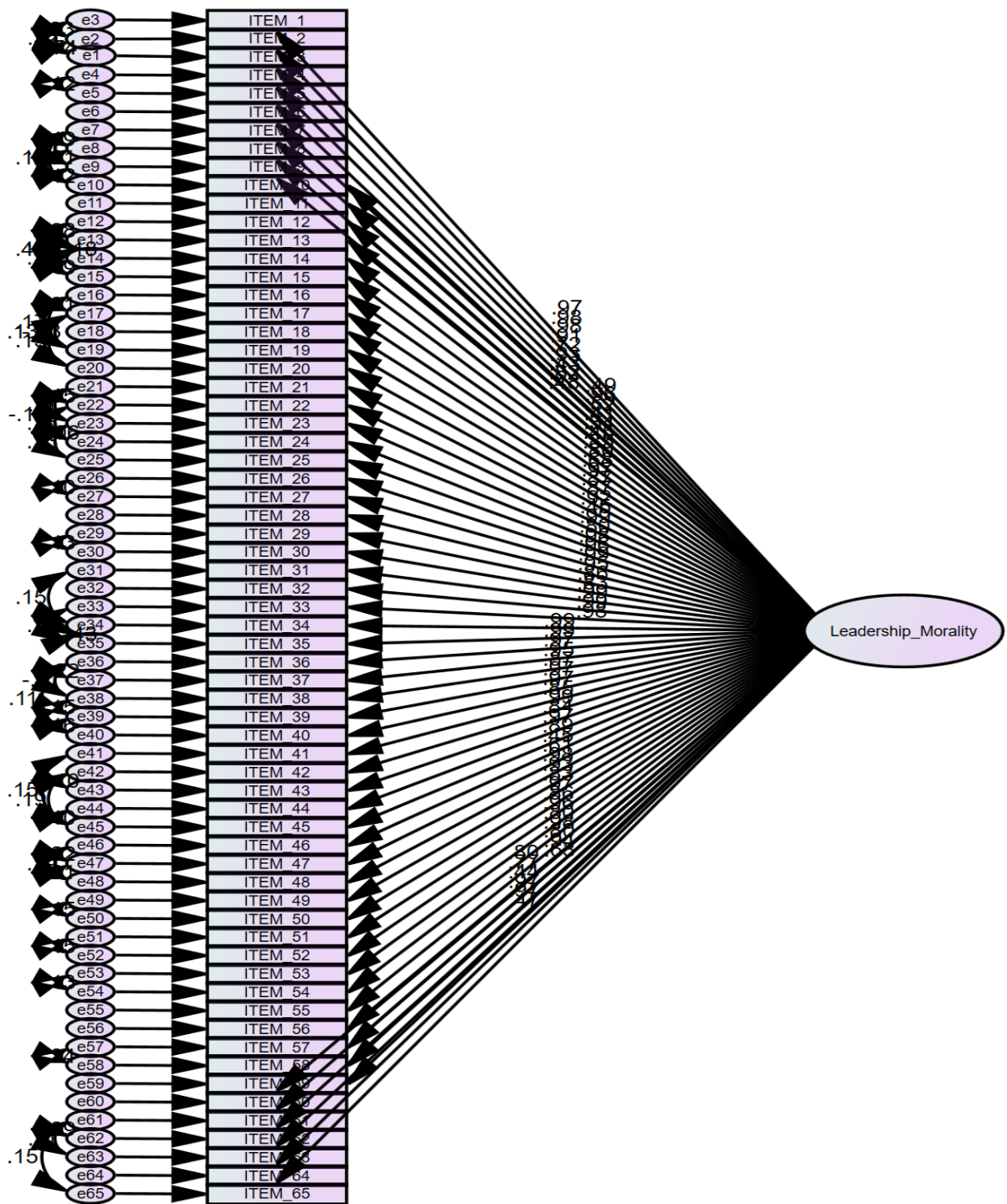


Figure 2. First-order Confirmatory Factor Analysis.

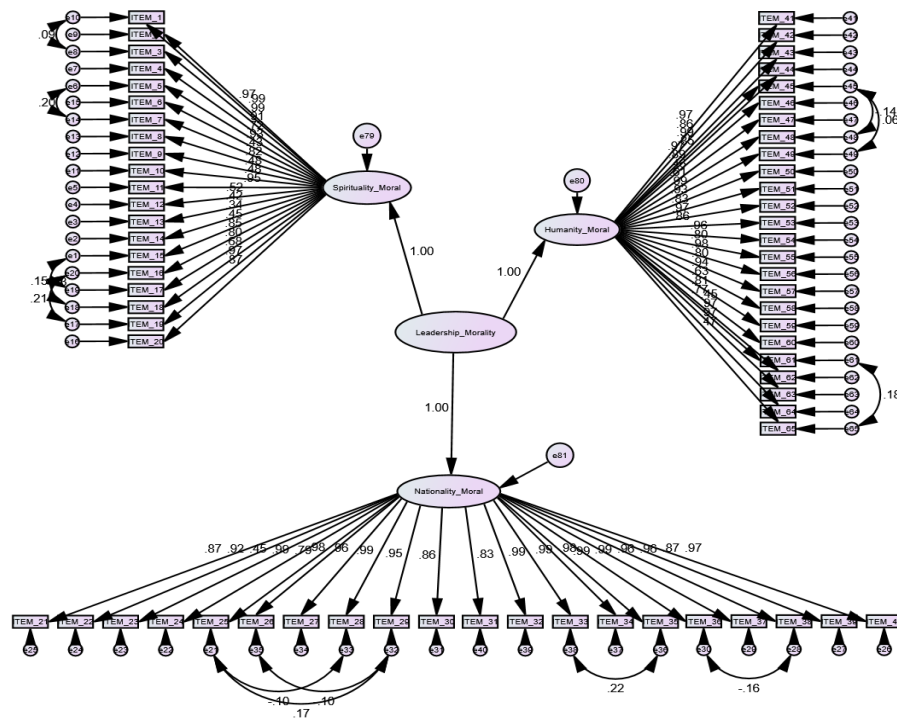


Figure 3. Second-order Confirmatory Factor Analysis.

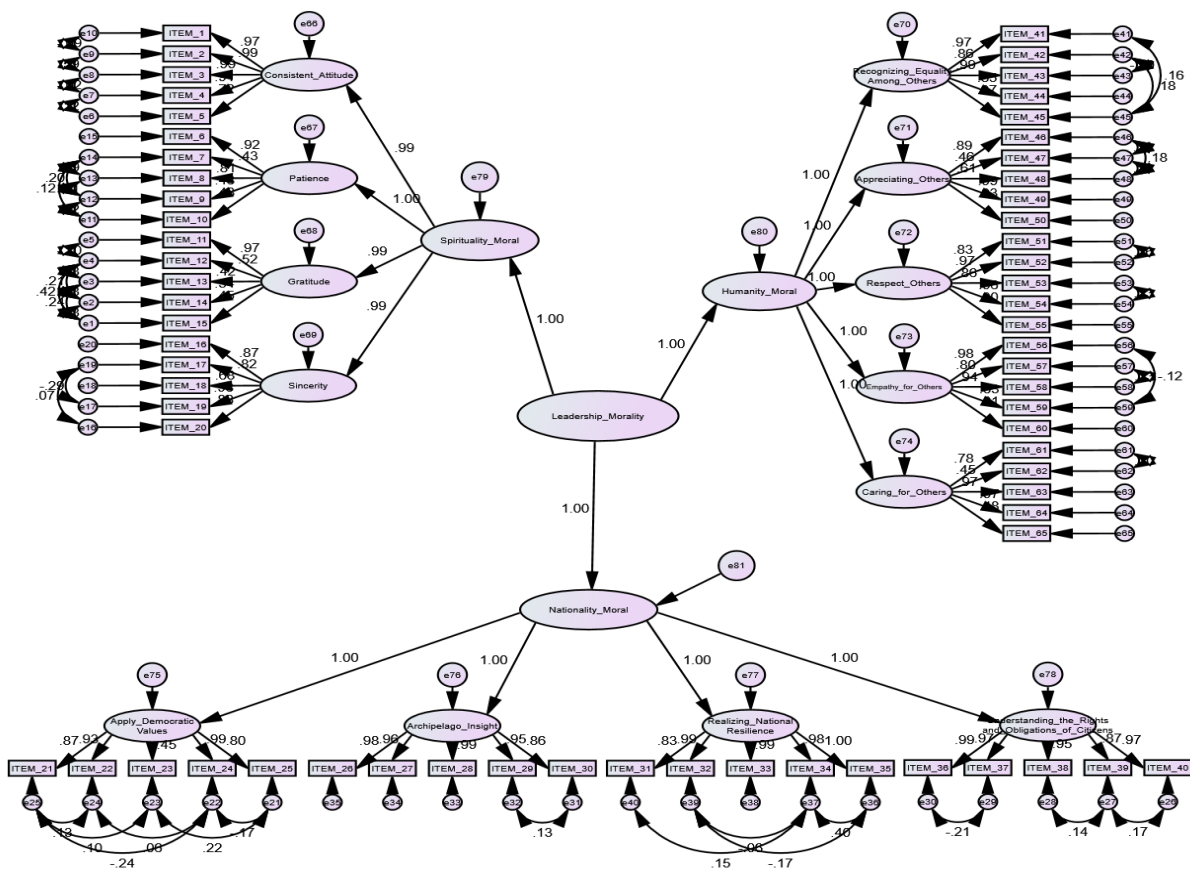


Figure 4. Third-order Confirmatory Factor Analysis.

Table 3. Model Fit Summary Comparison of First Order, Second Order, and Third Order.

Measure	First order (FO)	Interpretation FO	Second order (SO)	Interpretation SO	Third order (TO)	Interpretation TO
Absolute fit indices						
CMIN/DF	2.968	Good fit	3.246	Marginal fit	2.991	Good fit
GFI	0.654	Poor fit	0.611	Poor fit	0.651	Poor fit
RMSEA	0.074	Good fit	0.079	Good fit	0.074	Good fit
RMR	0.034	Good fit	0.037	Good fit	0.034	Good fit
Incremental fit indices						
IFI	0.916	Good fit	0.903	Good fit	0.916	Good fit
NFI	0.879	Marginal fit	0.865	Marginal fit	0.878	Marginal fit
TLI	0.911	Good fit	0.899	Good fit	0.91	Good fit
CFI	0.916	Good fit	0.903	Good fit	0.915	Good fit
RFI	0.872	Marginal fit	0.86	Marginal fit	0.871	Marginal fit
Parsimony fit indices						
PNFI	0.83	Marginal fit	0.832	Marginal fit	0.826	Marginal fit
PRATIO	0.945	Good fit	0.961	Good fit	0.94	Good fit
PCFI	0.865	Marginal fit	0.867	Marginal fit	0.861	Marginal fit
PGFI	0.599	Marginal fit	0.569	Marginal fit	0.594	Marginal fit

The researcher compared first, second, and third order models to determine the most suitable model. Table 3 indicates that the third order model has a better overall fit, with CMIN/DF, RMSEA, and incremental and parsimony fit indices showing favorable values.

4. 5. Factor Loading of Items

The researcher evaluated the factor loadings of each item in the instrument. Items with factor loadings below 0.5 were eliminated. The factor loading analysis of 65 items in Appendix F revealed that the majority of the items (52 out of 65) are valid across the first, second, and third orders, with factor loading values exceeding the threshold of 0.5. Items such as ITEM_1, ITEM_2, ITEM_3, and ITEM_35 exhibit exceptionally high validity, with factor loading values consistently above 0.9. However, 13 items, including ITEM_7, ITEM_9, ITEM_10, and ITEM_47, were deemed not valid due to their factor loading values being below the acceptable range.

4. 6. Reliability Evaluation

Reliability testing of the instrument measuring the morality of prospective primary school principal leadership showed high Cronbach's Alpha and Composite Reliability values, indicating exceptional reliability. Table 4 summarizes the reliability test results for the entire instrument, moral aspects, and moral competencies.

Table 4. Reliability Evaluation.

Measurement Instrument for the Morality of Prospective Elementary School Principals	Cronbach's Alpha	Interpretation	Composite Reliability	Interpretation
Morality Aspect				
Spiritual Morality	0.962	Excellent	0.968	Excellent
Nationality Morality	0.991	Excellent	0.992	Excellent
Humanity Morality	0.983	Excellent	0.985	Excellent
Moral Competence				
Consistent Attitude	0.964	Excellent	0.973	Excellent
Patience	0.799	Good	0.861	Good
Gratitude	0.768	Good	0.841	Good
Sincerity	0.925	Excellent	0.945	Excellent
Applying Democratic Values	0.909	Excellent	0.934	Excellent
Having an Archipelago Insight	0.978	Excellent	0.983	Excellent
Realizing National Resilience	0.982	Excellent	0.986	Excellent
Understanding Rights and Obligations as Citizens	0.979	Excellent	0.984	Excellent
Recognizing Equality with Others	0.969	Excellent	0.976	Excellent
Appreciating Others	0.891	Good	0.922	Excellent
Respecting Others	0.948	Excellent	0.960	Excellent
Empathy for Others	0.920	Excellent	0.941	Excellent
Caring for Others	0.861	Good	0.902	Excellent

Cronbach's Alpha and Composite Reliability values approaching or exceeding 0.9 indicate very high reliability. Overall, the instrument demonstrates strong internal consistency in measuring the construct of morality in prospective primary school principal leadership.

4. 7. Norms

Norms for the instrument measuring morality in prospective primary school principal leadership were established based on the 55 test items that had undergone expert review, readability test, validity test, and reliability test.

Table 5. Distribution of Items Across Moral Aspects and Competencies.

Moral Aspect	Competency	Number of Items
Moral Spiritual	Consistent Attitude	5
	Patience	2
	Gratitude	2
	Sincerity	5
Total Spirituality Moral Items		14
Moral Nationality	Applying Democratic Values	4
	Archipelago Insight	5
	Realizing National Resilience	5
	Understanding Rights and Obligations as Citizens	5
Total National Moral Items		19
Moral Humanity	Recognizing Equality with Others	5
	Appreciating Others	4
	Respecting Others	5
	Empathy for Others	5
	Caring for Others	3
Total Humanity Moral Items		
Overall Moral Items		55

As shown in Table 5, the lowest score obtained from these 55 items is 55, and the highest score is 220. Thus, norms for the instrument were established using percentile points. Descriptive statistics revealed that P10 = 71, P20 = 88, P30 = 104, P40 = 121, P50 = 137, P60 = 154, P70 = 170, P75 = 178, P80 = 187, and P90 = 203 (Table 6).

Table 6. Percentile Points.

Percentile Point	Score
P10	71
P20	88
P30	104
P40	121
P50	137
P60	154
P70	170
P75	178
P80	187
P90	203

Based on these descriptive statistics, morality in prospective primary school principal leadership can be classified as shown in Table 7 below.

Table 7. Classification.

Percentile Point	Classification
75>	High
50 – 75	Moderate
<50	Low

Table 7 presents a classification system for assessing morality in leadership among prospective primary school principals using percentile scales. This system divides assessment results into three categories: high, moderate, and low.

5. Discussion

The development of the instrument for measuring the morality of leadership in prospective primary school principals involved a comprehensive process, translating the leadership morality variables into three moral aspects and further into 13 moral competencies, resulting in 65 items/questions, based on the model by Bafadal et al. (2021a). This approach ensured a multidimensional evaluation of moral leadership, encompassing various aspects crucial for educational leaders. Content validity, assessed using the inter-rater agreement model by Gregory, was a key step in the development process (Gregory, 2016). This approach, validated by expert evaluation, is essential in ensuring the instrument's items align with the intended constructs (Miller & Lovler, 2020). High agreement scores between experts indicated strong alignment between the leadership morality variables, moral aspects, competencies, and the instrument items. Such high consensus underscores the instrument's relevance and reduces potential biases in expert evaluations (Das-Smaal, 1990; Johnson & Christensen, 2020).

Practicality, another critical aspect, was unanimously agreed upon by the experts. The instrument's design was clear, easy to administer, and accompanied by quality guidebooks, indicating its feasibility for practical use (Bajpai et al., 2015; Miller & Lovler, 2020; Uebersax, 1982). The need for specialized training, as indicated by the experts, emphasizes the importance of uniform administration and interpretation, reducing potential biases in the process. The readability test, conducted with 362 teachers in East Java Province, showed that 99.17% of respondents found the instrument's instructions easy to understand, and the language clear and simple (Rahmawati et al., 2018). High readability is crucial for ensuring respondents' comprehension, contributing to the accuracy of responses and the overall validity of the instrument (Peter et al., 2018; Qurratu et al., 2023).

Confirmatory factor analysis (CFA) was employed to evaluate the psychometric properties of the instrument, with the third-order model demonstrating the strongest fit among the tested models. This model's compatibility with the data, evidenced by CMIN/DF, RMR, and RMSEA values, suggests its efficacy in representing the complexity of the construct (Brown, 2015; Byrne, 2016; Hair et al., 2019; Hooper et al., 2007; Kline, 2016; Marsh et al., 2004). The balance between model fit, complexity, and parsimony in the third-order model makes it the most suitable for construct validity assessment. Factor loading analysis revealed strong correlations between most items and the measured factors, indicating significant contributions to the construct (Hair et al., 2019; Kline, 2016). Some items with lower loadings were identified for potential removal to enhance the instrument's reliability and overall construct validity (Brown, 2015). The reliability test results indicated high internal consistency, with excellent Cronbach's Alpha and Composite Reliability values. High reliability

is indicative of the instrument's ability to measure the concept consistently across different situations and populations (Cohen & Swerdlik, 2014; DeVellis & Thorpe, 2021; George & Mallery, 2003; Hair et al., 2019; Tavakol & Dennick, 2011).

Establishing norms using percentile points is a critical approach for understanding individual scores within a larger group context. This framework helps researchers and practitioners evaluate and develop moral leadership based on clear classifications (high, moderate, low). Norm setting facilitates the communication of measurement results, particularly in non-statistical environments, and affirms the instrument's external validity (Crocker & Algina, 2006; Plake & Wise, 2014; Smolkowski, 2023; Thompson, 2008). It recognizes leadership morality as a multidimensional construct, reflecting competencies and values crucial in education. Percentile classifications aid in identifying areas for improvement and providing appropriate interventions (Shapiro & Stefkovich, 2016).

5. 1. Significance of the Current Findings

The current study offers a comprehensive evaluation of a morality assessment instrument tailored for prospective primary school principals. This instrument demonstrated excellent validity, reliability, practicality, and usability, making it a notable contribution to the field of educational leadership. The findings align with and extend previous research on morality measurement instruments, presenting unique strengths and refinements in the following areas: 1) Unlike many previous instruments such as the Moral Attentiveness Scale (Dong & Ni, 2018), which reported moderate to low fit indices (e.g., GFI = 0.62, CFI = 0.61), the current study achieved perfect content validity (index = 1) through rigorous expert evaluation. This indicates a strong alignment between the moral constructs and the instrument's items, ensuring relevance for the target population in educational settings. 2) The instrument outperformed previous studies like the Moral Competence Test (MCT) (Biggs et al., 2015), which showed low reliability scores (Cronbach's Alpha = 0.34–0.62). The current instrument achieved Cronbach's Alpha values ranging from 0.768 to 0.991, demonstrating high internal consistency across all moral aspects and competencies. Notably, it aligns closely with instruments such as the Moral Integrity Scale (Nunthawong et al., 2020), which also reported high reliability (Alpha = 0.92). 3) The confirmatory factor analysis (CFA) of the current instrument revealed good fit indices across first-order, second-order, and third-order models, with the third-order model selected as the best fit (CMIN/DF = 2.991, RMSEA = 0.074). This hierarchical modeling approach is more robust than many previous instruments, such as the Moral Foundations Questionnaire (Graham et al., 2011), which utilized simpler factor structures (e.g., single-factor and multi-factor models with mixed results). 4) The practicality and readability tests in the current study, involving 362 teachers and expert raters, emphasized user-friendliness and comprehensibility. Previous instruments, such as the Moral Identity Questionnaire (Black & Reynolds, 2016), often lacked comprehensive evaluations of practical application, leaving usability aspects underexplored.

5. 2. Comparison to Prior Instruments

The current study builds on the strengths of earlier tools while addressing their limitations: 1) The instrument evaluates three moral aspects (spiritual, nationality, humanity) and their related competencies, offering a broader scope compared to the narrower focus of instruments like the Moral Vitalism Scale (Rudnev et al., 2020), which measured only existential and motivational aspects of morality. 2) The inclusion of competencies such as "Having an Archipelago Insight" and "Realizing National Resilience" aligns the instrument with Indonesian cultural and educational values, making it more contextually relevant than global instruments like the Defining Issue Test-2 (DIT-2) (Id et al., 2020). 3) Unlike many prior studies that focused on validity or reliability in isolation, this study integrates content validity, CFA, reliability, practical usability, readability, and norm development.

The percentile-based norms offer practical utility for categorizing morality levels (high, moderate, low) in a real-world educational setting.

5. 3. Implications for Educational Leadership

The instrument plays a vital role in educational management, serving as a foundation for moral leadership principles influencing the entire educational system. It goes beyond assessing individual competencies, contributing to broader educational leadership development. 1) Classification in Educational Leadership. Classification, particularly focusing on morality, is key in determining leadership quality and effectiveness in schools. It involves assessing both administrative competencies and the moral values of prospective principals, reflecting a shift towards a more holistic, value-oriented leadership model (Greenfield Jr., 2004; Leithwood, 2007; Sergiovanni, 1992; Starratt, 2004). This comprehensive classification supports the creation of a more moral school environment, ultimately benefiting student and staff well-being and academic achievement. 2) Screening in Educational Leadership. Screening is crucial in selecting primary school principals, especially in measuring moral and ethical aspects. Effective screening ensures not only suitable leadership qualities but also high moral awareness (Bush & Glover, 2014; Fullan, 2015; Hargreaves & Fink, 2006; Starratt, 2004). The screening process helps identify teachers with high moral capacity for leadership roles, ensuring integrity in the educational environment and improving overall school leadership quality (Clandinin, 2006; Leithwood et al., 2008). 3) Placement in Educational Leadership. Appropriate placement of principals based on their moral evaluation is key to school success (Fullan, 2015; Hallinger & Heck, 2010; Northouse, 2019; Robinson, 2008; Seashore Louis et al., 2010; Spillane & Lee, 2014). The instrument's use in placement decisions ensures leadership adheres to moral standards and promotes a supportive learning environment, contributing significantly to national educational goals.

6. Conclusion and Limitations

This study presented the rigorous development and validation of an instrument to assess the moral leadership qualities of prospective primary school principals, embodying a significant contribution to educational leadership research. The instrument, meticulously constructed through a multi-dimensional framework comprising three moral aspects and 13 competencies, culminated in 55 items. The robust content validity, ascertained through the inter-rater agreement method and endorsed by experts, underscored its alignment with the intended moral constructs. The unanimous consensus on the instrument's practicality, augmented by the Kappa index, signified its ease of administration and clarity. Furthermore, readability assessments with 362 teachers validated its accessibility and comprehensibility.

Confirmatory factor analysis affirmed the psychometric robustness of the instrument, particularly the superiority of the third-order model in capturing the intricate nature of moral leadership. High factor loadings corroborated the relevance of most items, while lower loadings signaled areas for refinement. The instrument demonstrated exemplary reliability, evidenced by substantial Cronbach's Alpha and Composite Reliability scores, ensuring consistent measurement across varied contexts. Norms established via percentile points offered a nuanced framework for evaluating and fostering moral leadership, catering to diverse educational settings. While the study highlighted areas for refinement, such as improving items with lower factor loadings, it also opened avenues for further research. Future studies could focus on expanding the instrument to other regions or cultural contexts to ensure its generalizability, as well as applying it in real-world principal assessments to evaluate its practical impact.

Additionally, it is important to acknowledge the study's limitations, including its geographic focus on East Java, which may restrict generalizability. The low number of expert reviewers limits the breadth of perspectives in validating the instrument, and the exclusion of certain items in the CFA

due to low factor loadings could affect the comprehensiveness of the moral dimensions measured. Addressing these limitations in future research will further enhance the robustness and applicability of the instrument. This instrument not only facilitates the assessment of individual competencies but also propels the broader discourse on moral leadership in education, encompassing classification, screening, and placement processes pivotal to the cultivation of ethical and effective school leadership.

Declarations

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Appendices

Appendix A: Details of Research Respondents

		Frequency	Percentage (%)
Gender	Male	113	31.20
	Female	249	68.80
Education Level	Bachelor (S1)	306	84.50
	Magister (S2)	56	15.50
Age	<30	16	4.42
	31-40	214	59.12
	41-50	109	30.11
	51-60	23	6.35
Region	Malang City	39	10.77
	Malang Regency	80	22.10
	Surabaya City	22	6.08
	Sidoarjo Regency	13	3.59
	Pasuruan Regency	39	10.77
	Mojokerto Regency	18	4.97
	Kediri Regency	32	8.84
	Sampang Regency	13	3.59
	Bondowoso Regency	22	6.08
	Blitar Regency	14	3.87
	Ngawi Regency	8	2.21
	Jember Regency	21	5.80
	Magetan Regency	1	0.28
	Trenggalek Regency	1	0.28
	Bojonegoro Regency	6	1.66
	Pamekasan Regency	1	0.28
	Mojokerto City	4	1.10
	Probolinggo Regency	2	0.55
	Gresik Regency	1	0.28
	Tulungagung Regency	1	0.28
Bangkalan Regency	6	1.66	
Sumenep Regency	8	2.21	
Probolinggo City	1	0.28	
Pasuruan City	2	0.55	
Jombang Regency	4	1.10	
Banyuwangi Regency	2	0.55	
Nganjuk Regency	1	0.28	

Appendix B: The construct of leadership morality.

Moral aspect	Moral competence	Item number
Moral spiritual is the attitude of prospective principal teachers who apply the values of <i>istiqomah</i> (consistent attitude), patience, gratitude, and sincerity in teaching, guiding, and fostering all school residents.	Consistent attitude is an individual's ability to persist over time against a particular attitude of various other traits (Xu et al., 2020).	1, 2, 3, 4, 5
	Patience is an individual's ability to be calm in the face of adversity or suffering (Schnitker et al., 2021).	6, 7, 8, 9, 10
	Gratitude is an individual's attitude and/or behavior to express gratitude in response to receiving a gift (Peterson & Seligman, 2004).	11, 12, 13, 14, 15
	Sincerity is an individual's thoughts and/or feelings that are actually the same as those expressed outwardly (Caza et al., 2015).	16, 17, 18, 19, 20
National morality is the basis for teacher learning leadership practices for prospective principals by applying democratic values, having an archipelago outlook, realizing national resilience, and understanding the rights and obligations of citizens.	Applying democratic values is an individual's attitude and/or behavior in applying tolerance and freedom in expressing opinions in an educational environment (Çelik et al., 2022).	21, 22, 23, 24, 25
	Having an archipelago insight refers to the attitude and/or behavior of individuals in feeling unity, shared destiny, mutual compatriotship, and one determination in achieving the ideals of national development (Sunandar et al., 2022).	26, 27, 28, 29, 30
	Realizing national resilience is the attitude and / or behavior of individuals in facing adversity and crisis by adapting (Canetti et al., 2014), as well as loyalty to their homeland or nation (Peterson & Seligman, 2004).	31, 32, 33, 34, 35
	Understanding the rights and obligations as citizens is the ability of individuals to exercise the right to education, and the obligation to respect the human rights of others.	36, 37, 38, 39, 40
Moral humanity is the values in human morals including recognizing equality with others, respecting others, respect, empathy, and caring for others.	Recognizing equality with others is the attitude and/or behavior of individuals who do not discriminate on the basis of sex, ethnicity, race, political orientation, or other foreign conditions (Danopoulos, 2017).	41, 42, 43, 44, 45
	Appreciating others is the attitude and/or behavior of individuals who appreciate the things others have done as well as the contributions of others to their achievements (Garg & Mehak, 2021).	46, 47, 48, 49, 50
	Respect others are individual attitudes and/or behaviors that involve the intrinsic value of treating others with dignity (Sennett, 2003).	51, 52, 53, 54, 55
	Empathy for others is an individual's ability to understand and share the emotional states of others (Cuff et al., 2016; Decety & Jackson, 2004).	56, 57, 58, 59, 60
	Caring for others is an individual's attitude and/or behavior that shows concern for others through interpersonal processes characterized by intimate relationships and sensitivity (Finfgeld-Connett, 2008; Roland, 2014b).	61, 62, 63, 64, 65

Source: (Bafadal et al., 2021a)

Appendix C: Alignment Between Variables, Moral Aspects, and Moral Competencies with Items

Variable	Moral Aspect	Moral Competence	Item Number	Expert Judge #1	Expert Judge #2	Remarks
Morality of Prospective Elementary School Principal	Spiritual Morality	Consistent Attitude	1	4	4	D
			2	4	4	D
			3	4	4	D
			4	4	4	D
			5	4	4	D
		Patience	6	4	4	D
			7	4	4	D
			8	4	4	D
			9	4	4	D
			10	4	4	D
	Gratitude		11	4	4	D
			12	4	4	D
			13	4	4	D
			14	4	4	D
			15	4	4	D
		Sincerity	16	4	4	D
			17	3	3	D
			18	3	4	D
			19	4	3	D
			20	3	3	D
Nationality Morality	Applying Democratic Values	21	4	3	D	
		22	3	4	D	
		23	3	3	D	
		24	3	4	D	
		25	3	3	D	
	Having an Archipelago Insight	26	3	4	D	
		27	3	4	D	
		28	4	4	D	
		29	4	3	D	
		30	4	4	D	
	Realizing National Resilience	31	4	4	D	
		32	4	4	D	
		33	3	3	D	
		34	4	4	D	
35		4	4	D		
Understanding Rights and Obligations as Citizens	36	3	3	D		
	37	3	4	D		
	38	4	4	D		
	39	4	4	D		
	40	3	4	D		
Humanity Morality	Recognizing Equality with Others	41	4	4	D	
		42	4	4	D	
		43	4	3	D	
		44	4	4	D	

Variable	Moral Aspect	Moral Competence	Item Number	Expert Judge #1	Expert Judge #2	Remarks
			45	4	4	D
	Appreciating Others		46	4	4	D
			47	4	3	D
			48	4	3	D
			49	4	4	D
			50	4	3	D
	Respecting Others		51	4	3	D
			52	4	4	D
			53	4	4	D
			54	4	3	D
			55	4	3	D
	Empathy for Others		56	4	4	D
			57	4	3	D
			58	4	4	D
			59	4	4	D
			60	4	3	D
	Caring for Others		61	4	4	D
			62	4	4	D
			63	4	3	D
			64	4	4	D
			65	4	4	D

Remarks:

- 1: Not relevant
 2: Irrelevant
 3: Relevant
 4: Very relevant

- A: Low relevance from expert 1 and expert 2
 B: High relevance from expert 1 and low relevance from expert 2
 C: Low relevance from expert 1 and high relevance from expert 2
 D: High relevance from expert 1 and expert 2

Appendix D: Expert Assessment of Practical Evaluation

Item No.	Assessment Aspect of Experts	Expert Judge #1	Expert Judge #2	Expert's Reasoning
1	Is the manual book for the instrument measuring the morality of prospective elementary school principals complete? (Information about the instrument's construct, administration instructions, and data processing and interpretation)	Yes	Yes	It meets the design, data processing & interpretation requirements, and the user guide.
2	Is the instrument measuring the morality of prospective elementary school principals easy to administer?	Yes	Yes	The instructions are clear, and the user guide is simple.
3	Are the administration instructions for the instrument measuring the morality	Yes	Yes	Easily understood.

	of prospective elementary school principals clear?			
4	Are the data processing procedures for the instrument measuring the morality of prospective elementary school principals clear?	Yes	Yes	The description is clear.
5	Is the interpretation of the results of the instrument measuring the morality of prospective elementary school principals clear?	Yes	Yes	The description is clear.
6	Is a high level of education qualification (Master's/Ph.D.) required as an administrator of the instrument measuring the morality of prospective elementary school principals?	No	No	It's clear.
7	Is special training required for administrators of the instrument measuring the morality of prospective elementary school principals?	Yes	Yes	To ensure uniform understanding and valid data.

Appendix E: Readability Test by Teachers

Assessment Aspect	Response	Count	Percentage	Reasons
Easy to understand the instructions for completing the instrument measuring the morality of prospective elementary school principals	Yes	359	99.17%	a. Concise, clear, and easy to understand. b. Language is easy to understand, simple, not convoluted. c. Clear intent and purpose in the instructions. d. Comprehensive and well-directed explanations.
	No	3	0.83%	a. Some words used are not understood. b. Not clear.
Easy to understand the language used in the questions of the instrument measuring the morality of prospective elementary school principals	Yes	360	99.44%	a. Standard language, clear, and simple. b. Easily comprehensible language. c. Not verbose in language. d. Uses everyday language.
	No			

Assessment Aspect	Response	Count	Percentage	Reasons
There are words in the questions of the instrument measuring the morality of prospective elementary school principals that are not understood	No	2	0.56%	a. Language is convoluted. b. Not suitable.
	Yes	49	13.54%	a. Confusing words. b. Unfamiliar terms.
Sentences in the questions of the instrument measuring the morality of prospective elementary school principals have clear meanings	No	313	86.46%	a. Frequently used everyday words. b. Words can be well understood.
	Yes	359	99.17%	a. Sequential and simple sentences. b. Easily understood sentences. c. Short and clear sentences. d. Sentences align with content.
Provided answer alternatives are understandable	No	3	0.83%	a. Sentences are too long. b. Confusing sentences.
	Yes	360	99.44%	a. Easily understood. b. Answer alternatives can be related to one's reality. c. Answer alternatives align with test questions.
	No	2	0.56%	a. Answer alternatives are difficult to distinguish from each other. b. Minimal differences between answer alternatives.

Appendix F: Factor Loading of Items

First order		Second order		Third order		Interpretation
	Factor loading		Factor loading		Factor loading	
ITEM_1	0.968	ITEM_1	0.972	ITEM_1	0.975	Valid
ITEM_2	0.985	ITEM_2	0.992	ITEM_2	0.99	Valid
ITEM_3	0.985	ITEM_3	0.992	ITEM_3	0.991	Valid
ITEM_4	0.913	ITEM_4	0.913	ITEM_4	0.914	Valid
ITEM_5	0.718	ITEM_5	0.717	ITEM_5	0.717	Valid
ITEM_6	0.926	ITEM_6	0.929	ITEM_6	0.924	Valid

First order		Second order		Third order		Interpretation
	Factor loading		Factor loading		Factor loading	
ITEM_7	0.432	ITEM_7	0.434	ITEM_7	0.432	Not Valid
ITEM_8	0.817	ITEM_8	0.819	ITEM_8	0.815	Valid
ITEM_9	0.478	ITEM_9	0.478	ITEM_9	0.477	Not Valid
ITEM_10	0.486	ITEM_10	0.481	ITEM_10	0.482	Not Valid
ITEM_11	0.956	ITEM_11	0.953	ITEM_11	0.967	Valid
ITEM_12	0.516	ITEM_12	0.523	ITEM_12	0.524	Valid
ITEM_13	0.413	ITEM_13	0.42	ITEM_13	0.421	Not Valid
ITEM_14	0.339	ITEM_14	0.343	ITEM_14	0.343	Not Valid
ITEM_15	0.449	ITEM_15	0.452	ITEM_15	0.454	Not Valid
ITEM_16	0.851	ITEM_16	0.849	ITEM_16	0.866	Valid
ITEM_17	0.803	ITEM_17	0.801	ITEM_17	0.816	Valid
ITEM_18	0.679	ITEM_18	0.681	ITEM_18	0.682	Valid
ITEM_19	0.969	ITEM_19	0.967	ITEM_19	0.978	Valid
ITEM_20	0.874	ITEM_20	0.868	ITEM_20	0.88	Valid
ITEM_21	0.871	ITEM_21	0.87	ITEM_21	0.874	Valid
ITEM_22	0.923	ITEM_22	0.924	ITEM_22	0.926	Valid
ITEM_23	0.45	ITEM_23	0.451	ITEM_23	0.448	Not Valid
ITEM_24	0.987	ITEM_24	0.987	ITEM_24	0.991	Valid
ITEM_25	0.796	ITEM_25	0.795	ITEM_25	0.8	Valid
ITEM_26	0.976	ITEM_26	0.976	ITEM_26	0.976	Valid
ITEM_27	0.96	ITEM_27	0.961	ITEM_27	0.961	Valid
ITEM_28	0.988	ITEM_28	0.988	ITEM_28	0.987	Valid
ITEM_29	0.954	ITEM_29	0.955	ITEM_29	0.954	Valid
ITEM_30	0.856	ITEM_30	0.857	ITEM_30	0.856	Valid
ITEM_31	0.83	ITEM_31	0.832	ITEM_31	0.829	Valid
ITEM_32	0.991	ITEM_32	0.991	ITEM_32	0.992	Valid
ITEM_33	0.99	ITEM_33	0.99	ITEM_33	0.992	Valid
ITEM_34	0.976	ITEM_34	0.978	ITEM_34	0.977	Valid
ITEM_35	0.994	ITEM_35	0.995	ITEM_35	0.996	Valid
ITEM_36	0.99	ITEM_36	0.99	ITEM_36	0.99	Valid
ITEM_37	0.965	ITEM_37	0.964	ITEM_37	0.965	Valid
ITEM_38	0.955	ITEM_38	0.956	ITEM_38	0.954	Valid
ITEM_39	0.869	ITEM_39	0.869	ITEM_39	0.868	Valid
ITEM_40	0.973	ITEM_40	0.973	ITEM_40	0.973	Valid
ITEM_41	0.972	ITEM_41	0.972	ITEM_41	0.971	Valid
ITEM_42	0.855	ITEM_42	0.856	ITEM_42	0.856	Valid
ITEM_43	0.989	ITEM_43	0.989	ITEM_43	0.989	Valid
ITEM_44	0.844	ITEM_44	0.847	ITEM_44	0.846	Valid
ITEM_45	0.968	ITEM_45	0.969	ITEM_45	0.969	Valid
ITEM_46	0.891	ITEM_46	0.893	ITEM_46	0.894	Valid
ITEM_47	0.454	ITEM_47	0.458	ITEM_47	0.456	Not Valid
ITEM_48	0.605	ITEM_48	0.608	ITEM_48	0.606	Valid
ITEM_49	0.985	ITEM_49	0.986	ITEM_49	0.988	Valid
ITEM_50	0.926	ITEM_50	0.928	ITEM_50	0.93	Valid
ITEM_51	0.827	ITEM_51	0.829	ITEM_51	0.826	Valid

First order		Second order		Third order		Interpretation
	Factor loading		Factor loading		Factor loading	
ITEM_52	0.971	ITEM_52	0.971	ITEM_52	0.97	Valid
ITEM_53	0.862	ITEM_53	0.865	ITEM_53	0.863	Valid
ITEM_54	0.956	ITEM_54	0.956	ITEM_54	0.955	Valid
ITEM_55	0.796	ITEM_55	0.797	ITEM_55	0.795	Valid
ITEM_56	0.976	ITEM_56	0.977	ITEM_56	0.979	Valid
ITEM_57	0.804	ITEM_57	0.804	ITEM_57	0.804	Valid
ITEM_58	0.941	ITEM_58	0.943	ITEM_58	0.944	Valid
ITEM_59	0.628	ITEM_59	0.631	ITEM_59	0.633	Valid
ITEM_60	0.805	ITEM_60	0.807	ITEM_60	0.807	Valid
ITEM_61	0.772	ITEM_61	0.774	ITEM_61	0.776	Valid
ITEM_62	0.443	ITEM_62	0.446	ITEM_62	0.445	Not Valid
ITEM_63	0.967	ITEM_63	0.969	ITEM_63	0.971	Valid
ITEM_64	0.967	ITEM_64	0.967	ITEM_64	0.969	Valid
ITEM_65	0.468	ITEM_65	0.472	ITEM_65	0.476	Not Valid

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