


# Rasch Model Analysis of *Santri* Reverence Morals Scale

 Arina Mufrihah\*,  Mamat Supriatna, Ahman Ahman  
 Eka Sakti Yudha,  Juntika Nurihsan\*

Universitas Pendidikan Indonesia  
 [juntikanurihsan@upi.edu](mailto:juntikanurihsan@upi.edu)\*

## Abstract

Reverence, also known as *ta'dzim* in *Pondok Pesantren* (Islamic boarding schools), is a moral aspect which is taught to *santri* (students in Islamic boarding schools) as the most important value. *Ta'dzim* is delivered as an ethic, develops as a value, and grows to be part of a *santri's* personality and standard behavior. This study aims to develop a valid and reliable *Santri Reverence Morals Scale* (SRMS) through the Rasch Model analysis. The scale was supervised under an expert judgement evaluation which was involved 7 experts and distributed to 95 participants (male *santri* aged between 13-23 years) who were selected through stratified random sampling. The Rasch Model analyzed output and the interpretation included data about instrument, items, and person. This study indicated that the *Santri Reverence Morals Scale* is very reliable, predominantly fits items, and is unidimensionally proven. In this paper, such shortcomings as hard items, misfit items, and bias items are also discussed and evaluated. The composite analysis of instrument, items, and abilities concluded that the SRMS is a questionnaire with high reliability and validity (the item separation value is 3.40 and Cronbach alpha score is 0.82). This initial instrument testing stage requires further development so that a high-quality questionnaire can be produced to measure and study the *ta'dzim* of *santri*.

## Article Information:

Received 2024-06-07  
Revised 2024-08-05  
Published 2024-09-15

## Keywords:

Pesantren Education, Religious Education, Reverence Morals, Student Assessment, Student Ethics

## INTRODUCTION

*Santri* (students in Islamic Boarding Schools) in *Pondok Pesantren* (Islamic boarding schools) are required to learn and develop their reverence morals, especially a sense of reverence for *Ulama* (Islamic theologians) (Al, 1980; Dhofier, 2011; Hadiyanto et al., 2019; Huda et al., 2016; Izfanna & Hisyam, 2012; Mahmudi & Zuhri, 2021; Zarnuji, 1948). Reverence is commonly known as *ta'dzim* in *Pondok Pesantren*. The term is derived from Arabic vocabulary '*adzīmun* which means "the great one" and *ta'dzim* means "glorify" (Huda, 2021; Munawwir, 1984). Meanwhile, reverence outside the *pesantren* context has a slightly different meaning. Reverence is the virtuous capacity for love, respect, and humility. It begins from a profound understanding of human limitations and grows the capacity to be in amazement of whatever one believes lies outside human control, or something sacred or transcendent (Ai et al., 2016; Richardson, 2003; Schweitzer, 1965, 1987).

In previous research, *ta'dzim* studies in the *pesantren* education environment were studied qualitatively, looking at methods of internalization and cultivation of values and their dimensions in spiritual and affective aspects. This research is different from previous research

## How to cite:

Mufrihah, A., Supriatna, M., Ahman, A., Yudha, E. S., & Nurihsan, J. (2025). Rasch Model Analysis of *Santri* Reverence Morals Scale. *Islamic Guidance and Counseling Journal*, 8(1).  
<https://doi.org/10.25217/0020258548700>

## E-ISSN:

2614-1566

## Published by:

Institut Agama Islam Ma'arif NU (IAIMNU) Metro Lampung

in that it will fill the knowledge gaps of *ta'dzim* studies in the instrumental area to test the phenomenon of *santri's ta'dzim* in practical areas that are measurable and observable.

Reverence has root in ancient Western and Eastern cultures. One piece of historical evidence comes from Otto's view that reverence is an overabundant feeling of religious beatitude (Otto, 1928). In scholarly discourse, reverence received notable attention in the mid-20<sup>th</sup> century when Albert Schweitzer considered reverence a cardinal value in life reflecting a deep respect for all living beings and human existence. Coinciding with respect and humility, reverence is an essential component of the peak experience, according to Maslow (1970). It is a response to a greater entity with might beyond the self (Woodruff, 2001). More recently, departing from an existential-humanistic approach, reverence is posited as a psychologically measurable and self-transcending positive emotion. Thus, it is a sense of interconnectedness with the transcendent world, entailing positive emotions and an advanced level of cognitive appraisal.

On the other hand, *ta'dzim* in the *pesantren* world is a moral and ethical value which is taught through yellow books or traditional Islamic texts which are comprised of Muslim scholars' work. These have historical roots in Islamic scientific tradition that establishes that an integral part of learning process is for students to maintain a good and long-term relationship with their teacher (Saenong, 2021; van Bruinessen, 2012). *Ta'dzim* is the main feature of *pesantren* education and is inseparable from the educational process. In *pesantren*, a *Kiai* (a spiritual leader and caregiver) is a representation of the *Ulama*, with his role as a teacher for the *santri* (Humaisi et al., 2019; Rahtikawatie et al., 2021).

Learning from a pious teacher means simultaneously worshipping Allah and studying (Huda et al., 2017; Huda, et al., 2016; Tan, 2016). *Ta'dzim*, in the classical book, is an intermediary for obtaining blessings and meritorious knowledge (Huda et al., 2016). It is a spiritual connection which the culminative goal until Rasulullah and then to Allah (Djakfar & Permatasari, 2020; Fatoni, 1970; Gusmian & Abdullah, 2022; Ilahi, 1970; Kutsiyah et al., 2020). Departing from those definitions, *ta'dzim* includes spiritual, cognitive, affective, and behavioral dimensions. As reverence, it is a sense of interdependence and interconnection.

Reverence in *pesantren* is the standard behavior and an ideal part of the personality of the *santri*. It becomes a personal value, transforms into communal habituation, and is embodied in the form of interpersonal interaction with *Kiai* and older people in general (Bourdieu, 2004; Desiningrum et al., 2019; Huda et al., 2020). As an interpersonal characteristic, it plays a central role as the core guiding principle, as well as serving an optimal psychological function (Adame & Leitner, 2009; Huda & Kartanegara, 2015).

Interconnectedness is an important factor in healthy interpersonal functioning. The adaptive connectedness leads to stronger psychological resilience, for both women and men, and is considered a protective factor among adolescents. The positive aspects of connectedness, therefore, offer people from diverse cultures the opportunity to reconceptualize psychological dependence and personal well-being. For example, psychological resilience for both women and men may be recognized as stemming from the strength of healthy connectedness in the context of diverse societies (Amien et al., 2022; Desiningrum et al., 2019; Townsend & McWhirter, 2005).

The value of respect for life is relevant to contemporary education (Anam et al., 2019; Muhajir, 2022; Muhammad et al., 2021). At a time when collectivism was on the rise, Schweitzer developed an ethical code of individual self-fulfillment oriented around good character and a personal search for love and excellence (Martin, 2014). Reverence is what a successful teacher and student have in common as truth-seekers, an acknowledgment of intellectual limits in the face of transcendent truths which are believed (Arvidson, 2015). To be reverent is not always a factor of cultural origin, but comes from one's environment and education (Ye et al., 2021). Reverence is a powerful emotion that can inform and shape one's

attitudes toward self and others, especially in relation to the preponderance of life meaning and purpose (Paulson et al., 2021).

Some research discoveries have revealed the positive outcome of reverence. Reverence is the seed of benevolence which can potentially be extended to a wider environment (Pan et al., 2013). Reverence is a sense of moral and a highly moral person develops respectful behavior (Li et al., 2021) and it shows impressive consistency across adolescence (Hardy et al., 2011). Reverence, as one of the students' character attributes, promotes character development in adolescents, and places the young generation on a life-long trajectory to contribute to society as a whole (Wang, J et al., 2015; Wang et al., 2015) and has been identified as key to effective cross-cultural collaboration (Verdon et al., 2015).

One study reported that teenage students being disciplined in an empathic manner rather than a retributive system showed that they would have more respect for the teacher and be motivated to behave better in the future (Okonofua et al., 2016). Developing reverence affected the friendly and respectful personalities of the students and they developed mutual communication skills (Kralova, 2018). Reciprocal reverence was positively associated with cognitive flexibility, and it contributed positively to life satisfaction, self-esteem, and mental wellness (Jen et al., 2018). A sense of reverence predicted better postoperative outcomes. A sacred deep connection with a meaningful entity may assuage death anxiety and/or assist an individual dealing with (Ai et al., 2014). Both forms of reverence – secular and religious – were positively related to self-transcendence (Ai et al., 2016).

The construct and concept development of previous reverence scales refers more to Western cultures and views such as Student Teacher Relationship Scale (STRS) which is designed to assess teachers' perceptions of their relationship with students (Drugli, 2013); the Connection of Soul (COS) which is emphasized on measuring secular dimension, god-centered dimension, and cosmic dimension (Ai et al., 2014); Sense of Reverence Scale (SOR) consists of spiritual and secular context which is focused on the positive emotions of human psychological functioning. Both reverence forms were positively associated with self-transcendence (Ai et al., 2016); the Spiritual Health and Life Orientation Measure (SHALOM) which contains reverence as one of the scale domains (Moore, 2017); and The Assessment of Character in Children and Early Adolescents (ACCEA) that highlights reverence, in addition to 9 other attributes, as a positive attribute in youth (Wang, S et al., 2015).

Throughout research and development of the value of reverence, few psychological studies develop reverence as a concept and measure the reverence morals of middle school students. A number of previous studies regarding the positive correlation between reverence and various life aspects and skills were focused on measuring the reverence morals of adults and the elderly, with both secular and spiritual aspects. Some previous studies have developed and tested scale/questionnaire-related reverence (Ai et al., 2014; Boon & Lewthwaite, 2015; Bradshaw et al., 2014; Drugli, 2013; Li et al., 2012; Moore, 2017; Wang et al., 2015).

However, the development of a reverence scale to measure the reverence of middle-school- and higher-education-aged students in the context of *pesantren* education and culture has not been carried out. Therefore, this study aims to conduct a preliminary test on the *Santri* Reverence Morals Scale (SRMS) using the Rasch Model and to fulfill the need to develop a reverence scale around upper middle school and college level *santri* who use yellow books as the main reference for *pesantren* education in instilling standards of *santri*'s ethical behavior.

## METHODS

### Research Design and Procedure

A quantitative approach was employed for this research by using a cross-sectional research design. The development of SRMS refers to three phases of scale development and validation (Boateng et al., 2018; Koenig & Al Zaben, 2021). The first phase is item

development (i.e., conceptualization and item generation, and content validity), the second phase is scale development (i.e., pre-testing questions, scale administration, item reduction, and factors extraction), and the third phase is scale evaluation (i.e., dimensionality test, reliability test, and validity test).

The data were collected from male *santri* of Pondok Pesantren Annuqayah, Lubangsa Area, located in Guluk-Guluk Village, Sumenep Regency, Madura Island. The research sample was selected through a stratified random sampling technique based on three grade levels: *Ūlā* (junior high school) aged 13-15 years, *Wusthā* (senior high school) aged 16-18 years, and *Ulyā*

Table 1. The Design of *Santri* Reverence Morals Scale

No.	Aspects	Indicators	Types of Item		Number of Items
			<i>F</i>	<i>Uf</i>	
1	<i>Spiritual</i> (Spiritual)	<i>Patuh pada perintah yang baik sesuai dengan ajaran agama</i> (Obey good commandments in accordance with religious teachings)	1	2	2
		<i>Bersikap tawadu sebagai murid</i> (Act humble as a student)	3	4	2
		<i>Meminta rida</i> (Asking for blessing)	5	6	2
		<i>Mendoakan guru</i> (Praying for teachers)	7	8	2
		<i>Keyakinan bahwa guru sebagai penyalur kemurahan Allah</i> (The belief that the teacher is the channeler of God's mercy)	9, 10	11, 12	4
			Total item		12
2	<i>Kognitif</i> (Cognitive)	<i>Memiliki prasangka positif terhadap guru</i> (Have a positive prejudice towards teachers)	13	14	2
		<i>Komitmen belajar tuntas</i> (Complete learning commitment)	15, 16	17	3
			Total item		5
3	<i>Afektif</i> (Affective)	<i>Menyayangi dan menghargai guru</i> (Love and respect for teachers)	18, 19	20	3
		<i>Kepercayaan dan keyakinan pada guru</i> (Trust and belief in teachers)	21	22	2
		<i>Mengindahkan perkataan guru</i> (Heeding the teacher's words)	23	24	2
		<i>Melakukan yang disenangi guru</i> (Doing what teachers love)	25	26	2
			Total item		9
4	<i>Perilaku</i> (Behavior)	<i>Menjaga tingkah laku terpuji di hadapan guru</i> (Maintaining commendable behavior in the presence of teachers)	27	28	2
		<i>Tidak mempertentangkan pendapat guru</i> (Not disputing the opinion of the teacher)	29	30	2
		<i>Berpenampilan rapi ketika menemui guru</i> (Presents themselves as well-groomed when meeting the teacher)	31	32	2
		<i>Mendahulukan guru</i> (Putting teachers first)	33	34	2
		<i>Meneladani kerendah-hatian guru</i> (Exemplifying the teacher's humility)	35	36	2
			Total item		10
			Total all of item		36

(higher education) aged 19-23 years. Through Slovin's formula  $n = N / (1 + Ne^2)$ , the required sample size was ninety-five students. The objective of combining three grade levels is to produce a reverence scale that can measure and compare the level and dynamics of *santri*'s reverence from early adolescence to early adulthood. In addition, this age range is the average age of *pondok pesantren* students.

The SRMS was provided in paper form. The scale is accompanied by informed consent, an explanation of the research objectives and way to fill/ choose the answer option. The *santri* coordinator was assigned to distribute the scale to the selected respondents. Respondents were given a maximum of 1 hour to fill out the scale. The completed scale is collected back to the coordinator. Subsequently, the coordinator consigned it to the researcher. The data were processed using the WINSTEPS Rasch software. Analysis results were comprised of summary statistics, item misfit order, item measure order, Differential Item Functioning (DIF), unidimensionality, and rating scale. "Items" refers to the questions on the questionnaire distributed to students. There were two types of items: F and  $U_f$ , which refer to favorable items and unfavorable items.

### Item Development

The conceptual analysis (scale concept) of *Santri Reverence Morals Scale* was developed from yellow books (traditional Islamic texts) including *Ihyâ' 'Ulûm al-Dîn* (Al-Ghazâlî, 1980), *Ta'lim al-Muata'allim Tariq at-Ta'allum* (Zarnuji, 1948), and *Adabul 'Alim wal Muta'allim* (Asy'ari, 2016). The scale construct of *Santri Reverence Morals Scale* (Table 1), there are four aspects of reverence: spiritual, cognitive, affective, and behavior. Each aspect consists of several items, each item consists of favorable and unfavorable items. The number of each type of item was made the same to ensure the consistency of participants' answers when filling out the self-assessment questionnaire.

The scale was developed under an expert judgement: three experts of instrument construct, two experts of instrument content, and two experts of Bahasa Indonesia (content validity). Furthermore, a readability test was also undertaken on fifteen student representatives.

### Scale Development

The readability test (pre-testing questions) involved five *Ūlā santri*, five *Wusthā santri*, and five *Ulyā santri* after the content validity was approved by all expert judges. The readability test was carried out in two ways, firstly by the scale answer trials and secondly by interviewing the *santri* about their understanding and interpretation regarding the use of words and sentences in each item.

The scale was administered through paper administration (scale administration). After receiving some input from all judges, the scale was distributed to ninety-five respondents at the same time. It was coordinated by each head of the regional management in the Lubangsa area. Respondents were given a maximum of 60 minutes to answer 36 items. The item reduction and factors extraction was determined by Item misfit order (item analysis) based on outfit means-square, outfit z-standard, and point measure correlation value (Alagumalai et al., 2005; Boone et al., 2014).

### Scale Evaluation

Scale evaluation includes person measure, unidimensionality, and rating scale validity. Person measure for respondent ability assessed the trend of respondents' answers on each item, person reliability and Cronbach alpha based on the value of INFIT and OUTFIT MNSQ measured the scale reliability. Unidimensionality aims to evaluate the instrument construct validity. Rating scale validity has been verified through Observed Average and Andrich Threshold, see table 2.

Table 2. Analysis Stages

Unit of analysis	Type of analysis	Analysis criteria
Instrument analysis	Scale quality (the purpose of the analysis is to determine the item quality, person quality, and the scale quality; to ensure the reliability and validity of the scale)	The Cronbach alpha is used to measure the scale reliability. Minimum acceptable reliability is alpha value > 0.70 (Bond & Fox, 2015; Tennant et al., 2011). The item separation indices of <2 = poor, 2–3= good enough, 3–4 = good, 4–5 = very good, and >5 = excellent.
	Unidimensionality (the purpose of the analysis to evaluate the scale construct or the scalability)	The criteria for interpretation are: enough if 20–40%, good if 40–60%, and excellent if above 60%
Item analysis	Fit/misfit item (the purpose of the analysis is to decide which items are valid and invalid)	Outfit MNSQ ranging in $0.5 < x < 1.5$ indicates the item is fit with the model and Outfit ZSTD rangin in $-2.0 < x < 2.0$ indicates the item is fit with the model
	Item measure order (the purpose of the analysis is to determine the difficulty level of the item)	Item score of >1 is hard, ranging in 0-1 is difficult, ranging in -1 – 0 is easy, and score of < -1 is very easy
	DIF test (analysis objective to categorize biased and unbiased items)	Item DIF probability < 0.05 is categorized as biased and item DIF probability > 0.05 is categorized as unbiased
Ability analysis	Summary of category structure (Table 8) serves to analyze the rating scale validity	An increase in the logit value indicates the respondents' ability to distinguish the answer choices
	Analysis of person's ability (the purpose of the analysis is to investigate the participants ability criteria)	The analysis is carried out based on the sum between the SD and mean score. Person score > sum indicates high ability, person score ranging between -sum and sum indicates medium ability, and person score < -sum indicates low ability.

## RESULTS AND DISCUSSION

### Results

The Rasch Model application for the *Santri* Reverence Morals Scale (SRMS) resulted in information on validity, reliability, misfit and measure order, item bias, unidimensionality, and rating scale.

### Instrument Analysis

Person and item quality (Table 3) is a summary of statistics which points out the instrument quality. The value of person measure is logit 0.98, which is a value of the respondent's mean score in the SRMS. The mean score being higher than logit 0.00 showed that majority of respondents' answers were "always" for most of the items. Moreover, the respondents' ability is higher than the item difficulty level.

The value of person reliability is 0.82 meaning the answer consistency is "good". The value of item reliability is 0.92 meaning the item quality is "very good". The evaluation of instrument quality is decided based on the criteria of rank values: the value <2 = poor, 2–3= good enough, 3–4 = good, 4–5 = very good, and >5 = excellent. The item separation value is 3.40. It was concluded that SRMS has a good quality, see table 3.

The Cronbach's alpha measured the scale reliability (i.e., the entire interaction between respondents and items). The raw score for the "test" reliability is 0.82. The Cronbach's alpha value is >0.8, it means the SRMS reliability is "very good". The ideal score of INFIT and OUTFIT MNSQ would be closer to 1; meanwhile, the ideal score of INFIT and OUTFIT ZSTD would be closer to 0. In measured person, the mean scores of INFIT and OUTFIT MNSQ in

Table 3. Person and Item Quality

Measured Person and Item	Score
Person measure (logit)	0.98
Person reliability	0.82
Item reliability	0.92
Person separation	2.16
Item separation	3.40
Cronbach alpha	0.82
INFIT MNSQ	1.00
INFIT ZSTD	0.04
OUTFIT MNSQ	1.05
OUTFIT ZSTD	0.13

sequence are 1.00 and 1.05, respectively, meaning the quality is “good”. The mean scores of INFIT and OUTFIT ZSTD are 0.04 and 0.13, respectively, meaning the quality is “good”.

The separation value implies the group of person and item. If the separation score is higher, the scale quality will belong to respondents and items, which is excellent to use to identify the person and item group. The equation model for the grouping is:  $H = [(4 \times \text{SEPARATION}) + 1] : 3$ . The person separation is 2.16 then  $H = [(4 \times 2.16) + 1] : 3 = 3.21$  which is equate to three respondent groups.

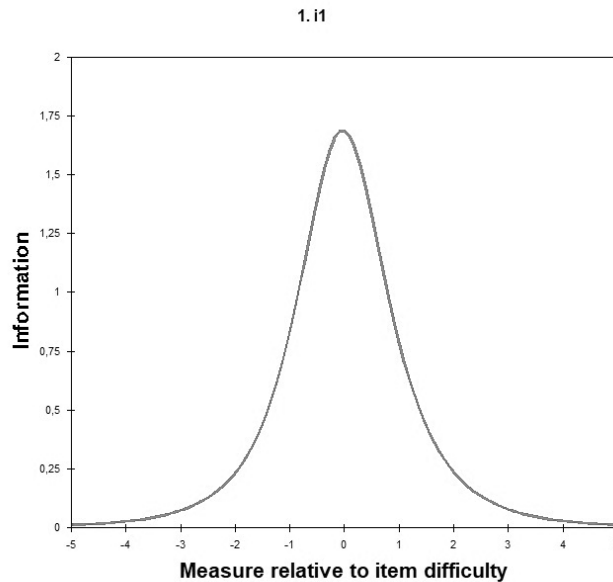


Figure 1. Test Information Function

The curve of information function (Figure 1) indicates which item set was answered by students. It can be seen on the curve that the respondents’ ability is moderate (measure or logit 0) and the information obtained by measurement is very high. Accordingly, the instrument items given to students produce optimal information when given to students with moderate abilities.

### **Unidimensionality**

Unidimensionality serves to evaluate the scale construct. The principal component analysis of the residual measures the extent to which the instrument variance measures what it is supposed to measure. Unidimensionality can be attested if raw variance is explained by measures  $\geq 20\%$  (Note: the general criteria for interpretation are: enough if 20–40%, good if 40–60%, and excellent if above 60%).

Table 4. Standardized Residual Variance

Eigen Value Units		Modeled	
Total raw variance in observations	49.1	100%	100%
Raw variance explained by measures	13.1	26.7%	27.9%
Raw variance explained by persons	3.4	7.0%	7.3%
Raw variance explained by items	9.6	19.7%	20.6%
Raw unexplained variance (total)	36.0	73.3%	100%
Unexplained variance in 1 <sup>st</sup> contrast	8.4	17.2%	23.4%
Unexplained variance in 2 <sup>nd</sup> contrast	3.8	7.7%	10.6%
Unexplained variance in 3 <sup>rd</sup> contrast	3.0	6.2%	8.5%
Unexplained variance in 4 <sup>th</sup> contrast	2.4	5.0%	6.8%
Unexplained variance in 5 <sup>th</sup> contrast	2.1	4.4%	6.0%

Table 5. Item Misfit Criteria

Measured Item	Fit/Misfit Criteria
OUT. MNSQ	$0.5 < x < 1.5$
OUT. ZSTD	$-2.0 < x < 2.0$
Measure correlation	Very good ( $>0.40$ )
	Good ( $0.30-0.39$ )
	Enough ( $0.20-0.29$ )
	Unable to conclude ( $0.00-0.19$ )
	Require checking ( $<0.00$ )

The output of Standardized Residual Variance (Table 4) denoted the raw variance explained by measures = 26.7%. It signified that the unidimensionality aspect is compliant with the measurement standard because the raw variance value exceeds 20%. The first through fifth unexplained variance is ideally no more than 15%. There were four of five unexplained variance values that met the ideal criteria.

### Item Analysis

Item misfit order (Table 5) is determined based on outfit means-square, outfit z-standard, and point measure correlation value (Alagumalai et al., 2005; Boone et al., 2014). The "use" decision is for items that meet all the criteria, the "revision" decision (Rev) is for items which meet at least 1 criterion, and the "discard" decision (Dis) is for items that do not meet all of the criteria (Table 6).

Through the interpretation of item measure order (Table 6), there were three out of thirty-six items categorized as a misfit item. In other words, the three items were invalid and cannot be included in the SRMS. In addition, the item difficulty level can be seen from the criteria of item measure order.

The item measure order (Table 7) is the information of items difficulty level. From the level difficulty categories, there is one item categorized as hard, nineteen items as difficult, sixteen items as easy, and no item was considered very easy. The further item analysis is identification of item by Differential Item Functioning (DIF test) (Table 8).

Probability value is a consideration to decide where an item falls after a DIF test, as bias or unbiased. If the probability was  $<0.05$ , then there is a significant difference between *Ūlā* (junior high school), *Wusthā* (senior high school), and *Ulyā* (higher education). From the Table 8, the probability of twelve items  $0.0179 (<0.05)$  and twenty-four items  $>0.05$ . Hence, the twelve items are identified having an indication of item bias.

### Ability Analysis

The summary of category structure (Table 9) serves to analyze the rating scale validity. This verifies whether the ranking options are confusing for respondents or not. In the SRMS



**Table 6. Interpretation of Item Measure Order**

No item	OUT. MNSQ (1)	OUT. ZSTD (2)	Measure Corr. (3)	Interpretation			Decision		
				1	2	3	Use	Rev	Dis
1	0.84	-1.11	0.46	√	√	√	√		
2	0.58	-3.19	0.49	√	√	√	√		
3	0.92	-0.49	0.52	√	√	√	√		
4	2.08	4.33	0.08	X	X	X			√
5	1.05	-0.92	0.38	√	√	√	√		
6	1.3	0.06	0.13	√	√	√	√		
7	0.71	-2.61	0.44	√	√	√	√		
8	0.98	-1.15	0.38	√	√	√	√		
9	0.71	-1.67	0.33	√	√	√	√		
10	0.99	-0.32	0.29	√	√	√	√		
11	0.94	-0.36	0.48	√	√	√	√		
12	0.54	-3.38	0.21	√	√	√	√		
13	0.45	-4.43	0.38	√	√	√	√		
14	1.36	0.41	0.3	√	√	√	√		
15	0.78	-1.38	0.35	√	√	√	√		
16	0.57	-3.44	0.67	√	√	√	√		
17	0.64	-0.77	0.5	√	√	√	√		
18	2.57	3.78	0.04	X	X	X			√
19	2.6	4.92	-0.05	X	X	X			√
20	0.76	-1.56	0.29	√	√	√	√		
21	0.6	-2.16	0.48	√	√	√	√		
22	1.08	-0.28	0.38	√	√	√	√		
23	1.53	1.27	0.27	X	√	√	√		
24	0.72	-1.67	0.28	√	√	√	√		
25	0.88	-1.44	0.28	√	√	√	√		
26	0.94	-1.09	0.5	√	√	√	√		
27	1.44	1.67	0.32	√	√	√	√		
28	1.35	2.04	0.52	X	√	√	√		
29	0.89	-0.6	0.51	√	√	√	√		
30	0.86	-0.42	0.66	√	√	√	√		
31	1.74	4.1	0.21	X	X	√		√	
32	0.9	0.38	0.36	√	√	√	√		
33	0.7	-1.38	0.29	√	√	√	√		
34	1.47	2.2	0.12	√	√	X	√		
35	0.52	-2.61	0.45	√	√	√	√		
36	0.75	-1.55	0.44	√	√	√	√		

instrument, a five-rating Likert scale is used ranging from “never” to “always”. In the Observed Average column, starting from logit 0.26 for score option 1 (never), logit 0.41 for option 2 (rarely), logit 0.57 for option 3 (sometimes), logit 0.83 for option 4 (often), and logit 1.30 for option 5 (always). There was an increase in the logit value from a choice score of 1 to 5. This shows that the respondents are able to distinguish the five answer choices or the answer choices used in the scale do not confuse the respondents.

**Table 7. Item Measure Order**

Range	Category	Number of Items
>1	Hard	6
0-1	Difficult	26, 8, 16, 1, 7, 30, 5, 13, 3, 2, 14, 12, 28, 36, 9, 11, 3, 15, 25
-1 - 0	Easy	4, 29, 24, 35, 20, 19, 33, 22, 27, 32, 10, 34, 17, 23, 21, 18
< -1	Veri Easy	-

**Table 8. DIF Test Output**

Category	Probability	Number of Items
Bias	<0.05	4, 6, 11, 14, 15, 25, 27, 28, 29, 30, 34, 36
Unbiased	>0.05	1, 2, 3, 5, 6, 7, 8, 9, 10, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 31, 32, 33, 35

Table 9. Summary of Category Structure

Category Label	Score (Option)	Observed Average	Andrich Threshold
1	1	0.26	NONE
2	2	0.41	-0.25
3	3	0.57	-0.24
4	4	0.83	0.13
5	5	1.30	0.36

Table 10. Person Ability Criteria

Range	Category	Number of Person
>1.48	High	Sixteen participants
-0.48 – 1.48	Medium	Seventy-eight participants
<-0.48	Low	One participant

Another recommended measure is the Andrich Threshold to test the accuracy of the polytomy values. The Andrich Threshold value moves from NONE to negative and any increase to positive sequentially indicates that the answer options used in the instrument statement items are correct and valid for the respondents. In the Andrich Threshold column, the values move from NONE, -0.25, -0.24, 0.13 to 0.36. The values are in order from NONE, negative to positive and from smallest to greatest value. As a result, the answer options are appropriate for the respondent.

The analysis of a person’s ability, in Table 10, refers to the sum between the SD (0.98) and mean score (0.50) and it equates to 1.48. Based on the participants ability criteria, there is only one out of all ninety-five participants who was categorized as having low ability, Sixteen out of ninety-five participants with high ability, and all others in the medium ability. Afterwards, the Misfit Person analysis was carried out. To investigate any misfit persons, the sum of the mean and SD score of the INFIT MNSQ (i.e.,  $1.00 + 0.30 = 1.3$ ) is used. If INFIT MNSQ value is greater than 1.3, then the participant was categorized as a “misfit person”. From the Person Misfit Order, there were eleven participants who were categorized as a misfit person (INFIT MNSQ score: 1.63, 1.63, 2.44, 1.63, 1.70, 1.35, 1.49, 1.52, 1.44, 1.45, and 1.36).

**Discussions**

*Santri* Reverence Morals Scale (SRMS) was developed to measure *santri*’s *ta’dzim* (reverence) morals as their ethical value, standard behavior, and ideal personality. An exemplary *santri* has high reverence, which leads them to be well-adjusted person whose knowledge contributes to the community and who has intrinsic motivation to contribute what they can to the world around them. The core value of *ta’dzim* is mainly rooted in the yellow books created and implemented by *Ulama* in the Muslim academic tradition. In this tradition, knowledge mastery and reverence go hand in hand in the process of achieving meritorious knowledge, as well as being spiritually connected to Rasulullah, and therefore to Allah. This interconnection is the intellectual chain which is obtained from *Kiai* as the pious teacher, the provenance from the *Ulama*, and its estuary to the Prophet Muhammad SAW.

**Instrument Quality**

The preliminary scale test produced a very good result for all components of the primary analysis: instrument, item, and person analysis. A number of important points from instrument analysis included: (1) the person’s ability is greater than the item difficulty level and the majority of people answered “always” for most of the items; (2) person reliability is consistent; the items quality is very good; (3) the SRMS reliability and quality is very good; and (4) this scale is best suited to moderate-ability participants, meaning the instruments will produce the most accurate information when it is completed by students with moderate ability.

### **Item Quality**

In this research, the level of the questions difficulty is not related to the respondents' ability to understand and answer the questions/ items. It is related to the majority of respondents' answer choices for the items. Item number 6 is classified as a hard item "*Saya membuat keputusan sendiri tanpa meminta rida Kiai*" (I made my own decision without asking for Kiai's blessing). The hard item means that the majority of respondents answered "seldom" or "never" for the item. To ask for a blessing, one must meet two conditions. First, a *santri* asks for a *Kiai*'s blessing before deciding important things related to such future plans such as selecting a future education path, career and business decisions, and choosing to marry. Meanwhile, to decide matters related to normal daily activities, students decide independently, not requiring deliberation as an intention to obtain blessings from *Kiai*.

Other than one very difficult item, sixteen items are easy and nineteen are difficult. Easy items indicate that the majority of respondents chose "always" on favorable items and selected "never" on unfavorable items. Analysis of the difficulty level of questions is not aimed at discarding and/ revising hard and difficult items. However, it is to reveal the balance of difficulty level of questions or items. Hard and difficult items do not indicate that the respondents do not understand the sentence or answer the question either, but rather due to the majority of answers to the item were "seldom" or "never". In contrast, the majority of answers to easy items were "always". Basically, the comparison between the difficulty levels of items is balanced, neither too many items are easy nor troublesome. In addition, the person's ability is higher than the difficulty of the item.

### **Instrument Construct Quality**

Unidimensionality is a fundamental requirement of Rasch Model. Unidimensionality indicators require interpretation in the context of theory as a basis for tests and practical situations that produce results. This provides an attractive context for the results interpretation of Rasch's modeling in the theory-practice dialogue (Bond & Fox, 2015). SRMS met the ideal criteria of unidimensionality which it means the scale measures only a single construct.

### **Misfit and Bias Items**

Item analysis generates the outliers and DIF. The item misfit order has identified three misfit items and one item is revised as needed. Therefore, we decided to discard these three items: item number four, which has spiritual aspects and is stated as, "*Dalam beberapa hal saya berpikir bahwa saya lebih tahu dibandingkan Kiai*" (In some ways I think that I know better than Kiai); item number eighteen in the cognitive aspects category, stating "*Saya ingin pindah pondok meskipun proses belajar belum tuntas*" (I want to move to another school even though the learning process in current *pesantren* has not been completed); and item number nineteen in the affective aspects category, which states "*Saya menganggap Kiai sebagai orang tua saya sendiri*" (I think of Kiai as my own parent). Item number thirty-one (the revision item), which is in the behavioral aspects category, stating "*Saya tidak mempertentangkan pendapat Kiai yang berbeda dengan pendapat tokoh lain*" (I am not disputing *Kiai*'s opinion which is different from the other figures).

The items are discarded based on the consideration that each of the three items do not meet the three criteria of fit items (Out. MNSQ, Out. ZSTD, and Measure Correlation). Based on item misfit order, item number 18, 19, and 4 are the most misfitting response strings. The overall responses on those items were poorly fitting which is due to the answer choices of the majority of respondents being judged to be unusual, such as more answer choices 3 (sometimes) in item nineteen, and answer choices 5 (always) in items eighteen and four. Meanwhile, item 31 was decided to be revised because it still meets the Measure Correlation criterion in the "sufficient" item quality category.

Based on DIF analysis, twelve items were detected as bias items. An item is equitable if the success probability on the item is the same for participants who have the same ability from the same population regardless of their characteristics. This means that all twelve items were still considered biased between the levels of the *Ūlā*, *Wusthā*, and *Ulyā* classes. Item bias is a test condition that is unfair, inconsistent, and disrupted by factors other than the participant's ability factor. Bias items cause a discriminative test for certain groups, such as gender, ethnicity, culture, region, and others (Osterlind, 1983). Person and item analysis must remain invariant across all appropriate measurement conditions. Instruments measuring a single latent trait must maintain their calibration under all appropriate measurement conditions.

Of the various causes of item bias, in this study, the bias between classes was due to an unequal level of understanding of the intent of the item text. In the Rasch Model analysis, invariance should be monitored empirically to detect 'floating' items and to diagnose possible causes. Invariant failure (e.g., DIF) warns of potential problems with measurement instruments or new understandings of its underlying latent nature (Bond & Fox, 2015; Stone, 2001). Thus, the bias of a test can be interpreted as a systematic error in measuring the members of a group under study. As a result, the bias items will be revised, see table 11.

The final version of SRMS consist of 33 items after eliminating 3 misfit items. Meanwhile, the twelve biased items are still included in the scale because they only need to be revised so that the items can be better understood by respondents from three grade levels.

### **Person Analysis**

The ability analysis showed an excellent result. The participants were able to distinguish the five answer choices. The five-rating Likert scale used in the instrument did not confound the respondents. The answer options used in the instrument were correct and valid for the respondents. If a person's ability is greater than the item, this implies that the probability of the person answering the test correctly is higher, or in the context of SRMS, the probability to answer "always" is higher. When a person has a more latent ability than the item requires, then the difference is positive and the probability of a person's success on that item is greater. The more a person's abilities surpass the item difficulty level requirement, the higher the positive difference and the person's probability of success. However, when the questions are too complex for a person, the difference is negative, and the person's probability of success is reduced.

### **The Position of SRMS Among Other Similar Scales**

Both the SRMS and other reverence-related scales, even though developed from different theories, congregate in the paradigm of reverence as a virtuous capacity in humans. Regarding the scale testing technique, the Culturally Responsive Pedagogy (CRP) Instrument (Boon & Lewthwaite, 2015) is merely scale that also employed the Rasch Model. The CRP denoted person reliability score of 0.93 and item reliability score of 0.98. This score is higher than the person reliability score (0.82) and item reliability (0.92) of the SRMS. Nevertheless, the SRMS and its comparison are high quality scales. Meanwhile, The Connection of Soul (CoS) Scale used factor analysis (Ai et al., 2014) and the Sense of Reverence Scale (SRS) used SEM (Ai et al., 2017). The scores from these two scales cannot be compared equally with the SRMS, except the Cronbach alpha score. Both scales are demonstrated adequate levels of reliability referring to the alpha value > 0.7.

The SRMS is unique because its typical context. In SRMS, reverence is the main characteristic of *santri* which is formed through the *pondok pesantren* education system, developed as a value inherent in the *santri*'s personality. This distinguishes SRMS from other scales that places reverence as a worldview and attitude to life including secular and religious reverence (Ai et al., 2014). In the religious context, reverence is a self-transcending positive

Table 11. The Final Version of SRMS

Aspects	Indicators	Items
Spiritual (Spiritual)	<i>Patuh pada perintah yang baik sesuai dengan ajaran agama</i> (Obey good commandments in accordance with religious teachings)	1, 2
	<i>Bersikap tawadu sebagai murid</i> (Act humble as a student)	3
	<i>Meminta rida</i> (Asking for blessing)	4, 5
	<i>Mendoakan guru</i> (Praying for teachers)	6, 7
	<i>Keyakinan bahwa guru sebagai penyalur kemurahan Allah</i> (The belief that the teacher is the channeler of God's mercy)	8, 9, 10, 11
Kognitif (Cognitive)	<i>Memiliki prasangka positif terhadap guru</i> (Have a positive prejudice towards teachers)	12, 13
	<i>Komitmen belajar tuntas</i> (Complete learning commitment)	14, 15, 16
Afektif (Affective)	<i>Menyayangi dan menghargai guru</i> (Love and respect for teachers)	17
	<i>Kepercayaan dan keyakinan pada guru</i> (Trust and belief in teachers)	18, 19
	<i>Mengindahkan perkataan guru</i> (Heeding the teacher's words)	20, 21
	<i>Melakukan yang disenangi guru</i> (Doing what teachers love)	22, 23
Perilaku (Behavior)	<i>Menjaga tingkah laku terpuji di hadapan guru</i> (Maintaining commendable behavior in the presence of teachers)	24, 25
	<i>Tidak mempertentangkan pendapat guru</i> (Not disputing the opinion of the teacher)	26, 27
	<i>Berpenampilan rapi ketika menemui guru</i> (Presents themselves as well-groomed when meeting the teacher)	28, 29
	<i>Mendahulukan guru</i> (Putting teachers first)	30, 31
	<i>Meneladani kerendah-hatian guru</i> (Exemplifying the teacher's humility)	32, 33

emotion that has an impact on psychological functioning (Ai et al., 2014) and spiritually useful relationships which have a positive influence on mental health (Moore, 2017). In a broader context, reverence is a parameter of school climate (Bradshaw et al., 2014) and an attribute of youth character development (Wang, S et al., 2015).

### Implications

This research adds a concept and construct of a reverence scale from the values of Muslim societies, especially *pesantren* culture and ethics. The SRMS contains relevant traditional values including spiritual, cognitive, affective, and cognitive aspects in high school students in *Pondok Pesantren*. Through a modern statistical approach, the SRMS is valid and reliable measure, based on the analysis of items, instruments, and abilities of respondents. Hence, the SRMS is worth using to measure students' understanding of reverence, students' beliefs in the substance of reverence, and interpret aspects of interconnection and interdependence in the practice of reverence.

### Limitations

The number of participants is a limitation in this study. Based on the norm of scale development, a sample size of less than one hundred is considered as a poor sample size. In the next SRMS development, it is necessary to add a larger number of samples to avoid measurement error and increase the level of replicable and generalization of scale use. The pre-

testing question stage is only 1 round. However, this weakness was overcome by the interviews and trials of filling in the scale by fifteen students as representatives of *Ūlā*, *Wusthā*, and *Ulyā santri*. Furthermore, the results of item analysis found bias and invalid items. This indicates that these items require revision and retesting.

## CONCLUSIONS

The SRMS, in the preliminary stage, still requires revision, especially in the regard of misfit and bias items. Another evaluation conducted was about the respondent's ability in comparison to the difficulty level of the items on the questionnaire. Overall, the analysis of instruments, items, and abilities inferred that the SRMS is a valid and reliable questionnaire. The reliability aspect is comprised of the consistency of respondents' answers and quality items. The SRMS consists of items that can be understood clearly by the participants and a five-choice answer model that can be differentiated and comprehended by participants. Indeed, this initial instrument testing stage requires further development so that a high-quality questionnaire can be produced to measure and study the *ta'dzim* of *santri*. Through the instruments tested with the Rasch Model as a modern statistical method, further research related to the measurement of *santri's ta'dzim* has the potential to complement the study of *ta'dzim* in *Pondok Pesantren*. This study has the potential to expand the understanding of *ta'dzim* as not blind obedience, nor does it justify the expression of respect for *Kiai* as a power relation without a comprehensive analysis of spiritual, affective, cognitive, and behavioral aspects that form the *ta'dzim* as a personal quality of *santri*.

## ACKNOWLEDGMENTS

We thank the *Lembaga Pengelola Dana Pendidikan (LPDP)*, The Indonesia Endowment Funds for Education, for providing financial support in the process of collecting the research data.

## AUTHOR CONTRIBUTION STATEMENT

This scale development is part of the doctoral program final project in which AM supervised by some experts from the idea development to the interpretation and analysis of research results. The concept and background of the study discussed with MS, the item development corrected by AH, the data and Rasch analysis evaluated by ES, and the data analysis received some inputs from JN.

## REFERENCES

- Adame, A. L., & Leitner, L. M. (2009). Reverence and Recovery: Experiential Personal Construct Psychotherapy and Transpersonal Reverence. *Journal of Constructivist Psychology*, 22(3), 253-267. <https://doi.org/10.1080/10720530902915168>
- Ai, A. L., Kastenmüller, A., Tice, T. N., Wink, P., Dillon, M., & Frey, D. (2014). The Connection of Soul (COS) scale: An assessment tool for afterlife perspectives in different worldviews. *Psychology of Religion and Spirituality*, 6(4), 316-329. <https://doi.org/10.1037/a0037455>
- Ai, A. L., Wink, P., Gall, T. L., Dillon, M., & Tice, T. N. (2016). Assessing Reverence in Contexts. *Journal of Humanistic Psychology*, 57(1), 64-97. <https://doi.org/10.1177/0022167815586657>
- Al, Ghazali. (1980). *Ihyâ' 'Ulûm al-Dîn*. 8. Dâr al-Fikr
- Alagumalai, S., Curtis, D. D., & Hungi, N. (2005). *Applied rasch measurement: A book of exemplars*. Springer. [Google Scholar](#)

- Amien, S., Setyosari, P., Murtadho, N., & Sulton, S. (2022). "Ana Yahanu Faqat": A Phenomenological Study on the Performance Character and Life Success. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2022.4916>
- Anam, S., Nyoman Sudana Degeng, I., Murtadho, N., & Kuswandi, D. (2019). The Moral Education and Internalization of Humanitarian Values in Pesantren: A Case Study from Indonesia. *Journal for the Education of Gifted Young Scientists*, 7(4), 815-834. <https://doi.org/10.17478/jegys.629726>
- Arvidson, P. S. (2015). The virtue of reverence in interdisciplinary studies. *Issues in Interdisciplinary Studies*, 33, 117–143. [Google Scholar](#)
- Asy'ari, H. (2016). *Adabul 'Alim wal Muta'allim* (M. I. Hadziq, Ed. 6th ed.). Pustaka Tebuireng. [Google Scholar](#)
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer. In *Frontiers in public health* (Vol. 6). Frontiers Media S.A. <https://doi.org/10.3389/fpubh.2018.00149>
- Bond, T. G., & Fox, C. (2015). Applying the Rasch Model; Fundamental Measurement in the Human Sciences. [Google Scholar](#)
- Boon, H. J., & Lewthwaite, B. (2015). Development of an instrument to measure a facet of quality teaching: Culturally responsive pedagogy. *International Journal of Educational Research*, 72, 38-58. <https://doi.org/10.1016/j.ijer.2015.05.002>
- Boone, W. J., Staver, R. J., & Yale, S. M. (2014). *Rasch analysis in the human sciences*. Springer. [Google Scholar](#)
- Bourdieu, P. (2004). *Distinction: A Social Critique of the Judgement of Taste*. Routledge. [Google Scholar](#)
- Bradshaw, C. P., Waasdorp, T. E., Debnam, K. J., & Johnson, S. L. (2014). Measuring school climate in high schools: a focus on safety, engagement, and the environment. *J Sch Health*, 84(9), 593-604. <https://doi.org/10.1111/josh.12186>
- Desiningrum, D. R., Indriana, Y., & Suparno. (2019). Positive Emotion, Engagement and Meaning of Life of the Elderly in Pesantren (Islamic Boarding School). *Indian Journal of Public Health Research & Development*, 10(3), 923. <https://doi.org/10.5958/0976-5506.2019.00620.X>
- Dhofier, Z. (2011). Tradisi Pesantren: Studi Pandangan Hidup Kyai dan Visinya Mengenai Masa Depan Indonesia. *LP3S*. [Google Scholar](#)
- Djakfar, F. A., & Permatasari, P. A. (2020). Ngabulâ Vis-À-Vis Modernity: Tabarruk Practice in Bangkalan Pesantren. *KARSA: Journal of Social and Islamic Culture*, 28(2), 337-362. <https://doi.org/10.19105/karsa.v28i2.4026>
- Drugli, M. B. (2013). How are Closeness and Conflict in Student–Teacher Relationships Associated with Demographic Factors, School Functioning and Mental Health in Norwegian Schoolchildren Aged 6–13? *Scandinavian Journal of Educational Research*, 57(2), 217-225. <https://doi.org/10.1080/00313831.2012.656276>
- Fatoni, N. (1970). Kultur Pesantren: Relasi Kiai, Santri, Dan Kitab Kuning. *IBDA` : Jurnal Kajian Islam dan Budaya*, 9(2), 165-177. <https://doi.org/10.24090/ibda.v9i2.37>
- Gusmian, I., & Abdullah, M. (2022). Knowledge Transmission and Kyai-Santri Network in Pesantren in Java Island During the 20th Century: A Study on Popongan Manuscript. *Jurnal Akidah & Pemikiran Islam*, 24(1), 159-190. <https://doi.org/10.22452/afkar.vol24no1.5>
- Hadiyanto, Tiani, R., Budi, W., & Maryono. (2019). Cultural Environment in Coastal Islamic Boarding School Regarding the Form of Politeness to Kyai. *E3S Web of Conferences*, 125, 09002. <https://doi.org/10.1051/e3sconf/201912509002>

- Hardy, S. A., Walker, L. J., Olsen, J. A., Skalski, J. E., & Basinger, J. C. (2011). Adolescent Naturalistic Conceptions of Moral Maturity. *Social Development*, 20(3), 562-586. <https://doi.org/10.1111/j.1467-9507.2010.00590.x>
- Huda, M. (2021). Islamic Philosophy and Ethics of Education: Al- Zarnūjī's Concept of Ta'zīm in his Ta'lim al-Muta'allim. *Ulumuna*, 25(2), 399-421. <https://doi.org/10.20414/ujis.v25i2.464>
- Huda, M., Jasmi, K. A., Mustari, I., Basiron, B., & Sabani, N. (2017). Traditional Wisdom on Sustainable Learning. *SAGE Open*, 7(1). <https://doi.org/10.1177/2158244017697160>
- Huda, M., & Kartanegara, M. (2015). Islamic Spiritual Character Values of al-Zarnūjī's Ta'lim al-Muta'allim. *Mediterranean Journal of Social Sciences*, 6(4S2), 229–265. <https://doi.org/10.5901/mjss.2015.v6n4s2p229>
- Huda, M., Yusuf, J. B., Azmi Jasmi, K., & Nasir Zakaria, G. (2016). Al-Zarnūjī's Concept of Knowledge ('Ilm). *SAGE Open*, 6(3). <https://doi.org/10.1177/2158244016666885>
- Huda, M., Yusuf, J. B., Azmi Jasmi, K., & Zakaria, G. N. (2016). Understanding Comprehensive Learning Requirements in the Light of al-Zarnūjī's Ta'lim al-Muta'allim. *SAGE Open*, 6(4). <https://doi.org/10.1177/2158244016670197>
- Huda, S., Muawanah, M., Syazali, M., Palupi, E. K., Umam, R., & Tortop, H. S. (2020). Islamic Education in Supply Chain System by Prioritizing Manners as a Success Factor of Millennial Generation on Socializing. *International Journal of Supply Chain Management*, 9(2), 853–863. <http://excelingtech.co.uk/>
- Humaisi, M. S., Thoyib, M., Arifin, I., Imron, A., & Sonhadji, A. (2019). Pesantren Education and Charismatic Leadership: A Qualitative Analysis Study on Quality Improvement of Islamic Education in Pondok Pesantren Nurul Jadid Paiton, Probolinggo. *Universal Journal of Educational Research*, 7(7), 1509-1516. <https://doi.org/10.13189/ujer.2019.070704>
- Ilahi, M. T. (1970). Kiai: Figur Elite Pesantren. *IBDA` : Jurnal Kajian Islam dan Budaya*, 12(2), 137-148. <https://doi.org/10.24090/ibda.v12i2.442>
- Izfaana, D., & Hisyam, N. A. (2012). A comprehensive approach in developing akhlaq. *Multicultural Education & Technology Journal*, 6(2), 77-86. <https://doi.org/10.1108/17504971211236254>
- Jen, C.-H., Chen, W.-W., & Wu, C.-W. (2018). Flexible mindset in the family: Filial piety, cognitive flexibility, and general mental health. *Journal of Social and Personal Relationships*, 36(6), 1715-1730. <https://doi.org/10.1177/0265407518770912>
- Koenig, H. G., & Al Zaben, F. (2021). Psychometric Validation and Translation of Religious and Spiritual Measures. *J Relig Health*, 60(5), 3467-3483. <https://doi.org/10.1007/s10943-021-01373-9>
- Kralova, E. (2018). Ethical issues in the teacher and the student relationship. *New Trends and Issues on Humanities and Social Sciences*, 30–36. [www.prosoc.eu](http://www.prosoc.eu)
- Kutsiyah, F., Hakim, L., & Kalsum, U. (2020). Kelekatan Modal Sosial Pada Keluarga Santri Di Pulau Madura. *Palita: Journal of Social Religion Research*, 5(2), 183-203. <https://doi.org/10.24256/pal.v5i2.1399>
- Li, J., Liu, H., van der Heijden, B., & Guo, Z. (2021). The Role of Filial Piety in the Relationships between Work Stress, Job Satisfaction, and Turnover Intention: A Moderated Mediation Model. *Int J Environ Res Public Health*, 18(2), 1–14. <https://doi.org/10.3390/ijerph18020714>
- Li, X., Zou, H., Liu, Y., & Zhou, Q. (2012). The Relationships of Family Socioeconomic Status, Parent–Adolescent Conflict, and Filial Piety to Adolescents' Family Functioning in Mainland China. *Journal of Child and Family Studies*, 23(1), 29-38. <https://doi.org/10.1007/s10826-012-9683-0>



- Mahmudi, A., & Zuhri, A. H. (2021). Bimbingan adab santri pondok pesantren darussalam blokagung melalui kajian kitab adab al 'alim wal muta'allim. *Jurnal At-Taujih: Jurnal Bimbingan Dan Konseling Islam*, 4(1), 22–37. [Google Scholar](#)
- Martin, M. W. (2014). Albert Schweitzer's Legacy for Education: Reverence for Life. *History of Education*, 44(2), 247-249. <https://doi.org/10.1080/0046760x.2014.966787>
- Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). Harper & Row. [Google Scholar](#)
- Moore, J. T. (2017). Multicultural and idiosyncratic considerations for measuring the relationship between religious and secular forms of spirituality with positive global mental health. *Psychology of Religion and Spirituality*, 9(1), 21-33. <https://doi.org/10.1037/rel0000083>
- Muhajir, A. (2022). Inclusion of pluralism character education in the Islamic modern boarding schools during the pandemic era. *Journal of Social Studies Education Research*, 13(2), 196–220. <https://doi.org/www.jsser.org>
- Muhammad, A. R., Suhaimi, S., Zulfikar, T., Sulaiman, S., & Masrizal, M. (2021). Integration of character education based on local culture through online learning in Madras Ahaliyah. *Cypriot Journal of Educational Sciences*, 16(6), 3293-3304. <https://doi.org/10.18844/cjes.v16i6.6559>
- Munawwir, A. W. (1984). *Al-Munawwir*. Penerbit Pustaka Progresif. [Google Scholar](#)
- Okonofua, J. A., Paunesku, D., & Walton, G. M. (2016). Brief intervention to encourage empathic discipline cuts suspension rates in half among adolescents. *Proc Natl Acad Sci U S A*, 113(19), 5221-5226. <https://doi.org/10.1073/pnas.1523698113>
- Osterlind, S. J. (1983). *Test item bias*. Sage Publication, Inch. [Google Scholar](#)
- Otto, R. (1928). *The idea of the holy: An inquiry into the non-rational factor in the idea of the divine and its relation to the rational*. Oxford University Press. [Google Scholar](#)
- Pan, Y., Gauvain, M., & Schwartz, S. J. (2013). Do parents' collectivistic tendency and attitudes toward filial piety facilitate autonomous motivation among young Chinese adolescents? *Motivation and Emotion*, 37(4), 701-711. <https://doi.org/10.1007/s11031-012-9337-y>
- Paulson, S., Sideris, L., Stellar, J., & Valdesolo, P. (2021). Beyond oneself: the ethics and psychology of awe. *Ann N Y Acad Sci*, 1501(1), 30-47. <https://doi.org/10.1111/nyas.14323>
- Rahtikawatie, Y., Chalim, S., & Ratnasih, T. (2021). Investigating The Role of Religious Leadership at Indonesia's Islamic Boarding Schools in The Sustainability of School Management. *Eurasian Journal of Educational Research*, 21(96). <https://doi.org/10.14689/ejer.2021.96.4>
- Richardson, F. C. (2003). Virtue Ethics, Dialogue, and "Reverence". *American Behavioral Scientist*, 47(4), 442-458. <https://doi.org/10.1177/0002764203256949>
- Saenong, F. F. (2021). Nahdlatul Ulama (NU): A Grassroots Movement Advocating Moderate Islam. In M. A. Upal & C. M. Cusack (Eds.), *Handbook of Islamic Sects and Movements* (pp. 129–150). Brill. [Google Scholar](#)
- Schweitzer, A. (1965). The Teaching of Reverence for Life. [Google Scholar](#)
- Schweitzer, A. (1987). *Civilization and Ethics in The Philosophy of Civilization*. Prometheus Books. [Google Scholar](#)
- Stone, M. (2001). Making standard measures. *Rasch Measurement Transactions*, 15(1), 792–793. [Google Scholar](#)
- Tan, C. (2016). Teacher-directed and learner-engaged: exploring a Confucian conception of education. *Ethics and Education*, 10(3), 302-312. <https://doi.org/10.1080/17449642.2015.1101229>
- Townsend, K. C., & McWhirter, B. T. (2005). Connectedness: A Review of the Literature With Implications for Counseling, Assessment, and Research. *Journal of Counseling & Development*, 83(2), 191-201. <https://doi.org/10.1002/j.1556-6678.2005.tb00596.x>

- Van Bruinessen, M. (2012). *Kitab Kuning, Pesantren dan Tarekat*. Gading Publishing. [Google Scholar](#)
- Verdon, S., Wong, S., & McLeod, S. (2015). Shared knowledge and mutual respect: Enhancing culturally competent practice through collaboration with families and communities. *Child Language Teaching and Therapy*, 32(2), 205-221. <https://doi.org/10.1177/0265659015620254>
- Wang, J., Ferris, K. A., Hershberg, R. M., & Lerner, R. M. (2015). Developmental Trajectories of Youth Character: A Five-Wave Longitudinal Study of Cub Scouts and Non-Scout Boys. *J Youth Adolesc*, 44(12), 2359-2373. <https://doi.org/10.1007/s10964-015-0340-y>
- Wang, J., Hilliard, L. J., Hershberg, R. M., Bowers, E. P., Chase, P. A., Champine, R. B., Buckingham, M. H., Braun, D. A., Gelgoot, E. S., & Lerner, R. M. (2015). Character in childhood and early adolescence: models and measurement. *Journal of Moral Education*, 44(2), 165-197. <https://doi.org/10.1080/03057240.2015.1040381>
- Wang, S.-Y., Wong, Y. J., & Yeh, K.-H. (2015). Relationship Harmony, Dialectical Coping, and Nonattachment. *The Counseling Psychologist*, 44(1), 78-108. <https://doi.org/10.1177/0011000015616463>
- Woodruff, P. (2001). *Reverence: Renewing a forgotten virtue*. Oxford University Press. [Google Scholar](#)
- Ye, H., Wang, Y., Lu, C., & Yang, X. (2021). Reverence of Life in Teenagers' Eyes. *Journal of Systems Science and Systems Engineering*, 30(3), 363-379. <https://doi.org/10.1007/s11518-021-5501-9>
- Zarnuji. (1948). Ta'lim al-Muata'allim Tariq at-Ta'allum. [Google Scholar](#)

Copyright holder :

© Author/s (2025)

First publication right :

Islamic Guidance and Counseling Journal

This article is licensed under:

**CC-BY-SA**