



Development and Validation an Instrument of Social Attitude for Islamic Higher Education Students

Rijal Firdaos¹, Encep Syarifudin², Purnama Rika Perdana³, Enung Nugraha⁴

^{1,2,3,4} Postgraduate Program of Universitas Islam Negeri Sultan Maulana Hasanuddin Banten, Indonesia

Article DOI: 10.55677/SSHRB/2026-3050-0208

DOI URL: <https://doi.org/10.55677/SSHRB/2026-3050-0208>

KEYWORDS: Instrument development, social attitude, factor analysis.

ABSTRACT: The aim of this research is to measure an instrument of student social attitude for Islamic higher education students. The population of this research is 321 Islamic students. The method research used is survey technique. This research applies Likert Scale as the parameter. The empirical research results through has confirmed 39 items are consist in three dimensions. The result by using factor analysis is indicating that all items indicator has factor loading more than 0.50, and support which has estimated with enough theory. Construct reliabilities by Alpha Cronbach indicate that instruments developed have fulfilled limit acceptance of reliabilities coefficient more than 0.70.

Corresponding Author:

Rijal Firdaos

Published: February 23, 2026

License: This is an open access article under the CC BY 4.0 license:

<https://creativecommons.org/licenses/by/4.0/>

INTRODUCTION

Education plays a crucial role in changing one's attitude. Education is an integral part of human culture and civilization, which continues to evolve, fostering creative and innovative potential in all areas of life (Hasbullah, 2005). Therefore, without education, a group of people cannot thrive in line with their aspirations for progress, prosperity, and happiness.

Education is not only focused on the intellectual capabilities a person possesses during their education; it is also integrated with other factors such as attitude, behavior, and character (Utomo & Muntholib, 2018). Hence, a person's outlook on life can be influenced by their attitude and actions. Attitude is an abstract concept that helps us understand human behavior. It is easier to understand another person's behavior if one first understands their attitude or background. Attitude plays a significant role in human life (Gerungan, 1998). Once an attitude is formed within a person, it will influence their behavior when facing an object.

Attitude is a relatively stable tendency or inclination to behave or act in a certain way in a particular situation (Palok Mayor, 1979). Attitude is a person's readiness to act in a certain way towards certain things. Attitude also includes levels of affection, both positive and negative, in relation to psychological objects (Mar'at, 2001). The psychological objects in question include: symbols, words, slogans, people, institutions, ideas, and so on (W, Back, 1997). A person is said to have a positive attitude towards a psychological object if they have a favorable attitude; conversely, a person is said to have a negative attitude towards a psychological object if they dislike or are unfavorable towards the object.

To determine the extent to which character values have been instilled in students, an assessment is required. Through observation, we can obtain information about the development of behavior and actions exhibited (Matanari et al., 2020) From the opinions above, it can be concluded that attitude is a person's tendency towards a particular object or subject, encompassing the dimensions of cognition, affection, and conation. Attitude is not behavior, but a tendency to behave in specific ways towards the object of attitude (Jalaluddin Rakhmat, 2004). The use of the word attitude must be followed by the word "towards" or "on" the object of the attitude, so that if someone says "positive attitude," he must question the attitude towards what or who (Ahmad, 2003). Meanwhile, social attitudes are assumed to be remnants of past experiences that guide future behavior (Ajzen et al., 2011). Social attitudes are a concern in social life, particularly in the form of student interaction with nature, the school environment, and the surrounding environment (Gusviani, 2016). Social attitudes are also individual awareness that determines real actions to behave in a certain way towards other people and prioritize social goals over personal goals in community life (Utomo & Muntholib, 2018).

Attitude alignment is an important predictor of interpersonal attraction. Individuals are more likely to be attracted to those whose attitudes align with their own on an issue than to those whose attitudes do not (Reid et al., n.d.) Attitudes

develop within a specific social framework, including economics, politics, religion, and education. In their development, attitudes are heavily influenced by the environment, norms, or groups. The occurrence of negative attitudes is related to social attitudes, not only affecting the general public (Firdaos, 2017). Students, as educated individuals, can be exposed to negative social attitudes. These include: low discipline in studying, poor manners in speaking, lack of integrity, irresponsibility, lack of optimism in facing the future, and several other examples.

Many scholars have previously conducted studies on social attitudes, including attitudes related to specific variables, such as the relationship between attitudes and behavior (Areskoug-Josefsson et al., 2019), emotional attitudes toward others' behavior (Chen et al., 2020), attitude surveys among elementary school students (Mason & Rich, 2020), and student attitudes toward people with disabilities (Mason & Rich, 2020). Furthermore, attitude measurement tools specifically developed to meet standard criteria for attitudes themselves have also been widely used. Such as the study of social attitude assessment using semantic differential I (Areskoug-Josefsson et al., 2019), measuring preschoolers' affective attitudes towards mathematics (Mason & Rich, 2020), developing an attitude scale towards distance learning (Mason & Rich, 2020), a scale of Islamic religious attitudes in Turkey (Mason & Rich, 2020), psychometrics of students' attitudes towards sexual health for social work students (Areskoug-Josefsson et al., 2019), and the development and validation of a scale of social worker attitudes towards disability (Areskoug-Josefsson et al., 2019). However, research specifically related to the development of a social attitude scale for Muslim students has received little attention so far. Therefore, to fill this gap, it is necessary to research to determine the extent of social attitudes among Muslim students using a factor analysis approach.

METHOD

The method used in this research is the survey method, where the information is collected from respondents using a questionnaire. Furthermore, according to Singarimbun, survey research can be used for the following purposes: Exploration, description, explanation, evaluation, prediction, and development of social indicators. The population in this study consisted of students from religious universities, with a sample of 321 students selected using quota sampling techniques. The data analysis used was factor analysis. Factor analysis is a model that was first developed as a method for studying phenomena that cannot be directly observed, such as intelligence, motivation, ability, attitude, and opinion (Raykov, Tenko, 2006). The function of factor analysis aims to identify the factors formed in a measurement (Harrington, 2009).

RESULTS AND DISCUSSION

Results

A. Validity and Reliability

During the pilot phase of this study, a 45-item social attitudes questionnaire was administered to 321 students. The following are the results of the factor analysis and reliability testing.

1. Factor Analysis

The first stage in factor analysis is to assess which variables are considered worthy of inclusion in further analysis. Factor analysis can be performed if the correlation between variables exceeds 0.5 (Hair, J., Blak, W.C., Babin, B.J., Andersen, R.E., & Ratham, 2006). This test is carried out by entering all variables to be tested. The logic of the test is that if a variable tends to group and form a factor, then it will have a reasonably high correlation with other variables. Below is the calculation of the results of SPSS for each dimension.

A. Integrity Dimension

The first step in factor analysis is to assess which variables are considered suitable for inclusion in further analysis. This testing is conducted by including all variables to be tested. The logic of the test is that if a variable tends to cluster and form a factor, it will have a reasonably high correlation with other variables. Conversely, variables with weak correlations with other variables tend not to cluster with a particular factor (Santoso, 2014).

The results of the factor analysis calculation using SPSS for Windows version 16.00 for the integrity dimension yielded a KMO of 0.714, which is considered high, along with a chi-square value of 436.455, significant at $p < 0.000$ (Df = 105).

The KMO and Bartlett's test values were 0.714, with a significance level of 0.000. Since these values are above 0.5 and significantly below 0.05, the variables and samples could be analysed further. However, a per-variable analysis was performed using the anti-image method.

Examination of the MSA figures for 15 integrity dimension items reveals that 14 items exhibit a greater value (> 0.5). Meanwhile, two other items, namely item A2, must be eliminated because they are below 0.5; a second analysis is then carried out by removing one of the items, A2. The significance criteria are: Sig. If the p-value is greater than 0.05, then H_0 is accepted. Sig. If $p < 0.05$, then H_0 is rejected. The MSA (Measure of Sampling Adequacy) number ranges from 0 to 1, with the following criteria: (a) $MSA = 1$, the variable can be predicted without error by other variables. $MSA > 0.05$, the variable can still be predicted and can be analysed further. $MSA < 0.5$, the variable cannot be predicted and cannot be analysed further, or is removed from other variables (Thompson, 2002). The recapitulation of MSA values, which overall have a value above 0.05, suggests that all variables

are worthy of further analysis. Below are the results of the KMO analysis, with a value of 0.728 and significance of 0.000, which is less than 0.005. This result is followed by the results of the second analysis, which includes items with an MSA > 0.05.

After the first stage, which involves filtering several variables to ensure that all variables meet the analysis requirements, the next step is the core process of factor analysis: extracting a set of existing variables to form one or more factors (Subhash Sharma, 1997).

The factor creation method (factor extraction) used the Principal Component Analysis method and is displayed in the Communalities table as the extraction result. The most significant number in item 6 (A6), namely 0.771, indicates that approximately 77% of the variance in the item 6 variable can be explained by the formed factor. The smallest percentage of variance is 0.495 in item 8, which means that the formed factor can explain 49.5% of the variance in the item 8 variable. And so on for other variables, with the provision that the greater the communalities of a variable, the closer its relationship with the formed factor. Further analysis is directed at examining (a) the number of eigenvalues that are > 1.0, (b) the comparison of the first eigenvalues with the second eigenvalues, and (c) examination of the scree plot, including the component plot in rotated space (Jackson, 1981).

The results of the overall analysis of variance can be explained by the components formed with eigenvalues greater than 1.00, where there are 5 (three) factors with eigenvalues greater than 1.00. Moreover, 1 (one) factor has the largest eigenvalue, namely factor 1 (3,487), which is then followed by factor 2 (1,532), factor 3 (1,406) and so on, so that cumulatively the five factors are 61,700 variances.

The results of the factor membership analysis using the Principal Component Analysis method with the Varimax rotation method, with Kaiser Normalisation, can be seen below.

Tabel.1. Rotation MatrixComponent

	Component				
	1	2	3	4	5
No.1	-.009	-.031	-.142	.779	-.098
No.3	.085	.062	.803	-.057	-.017
No.4	.150	.161	.259	.612	.096
No.5	-.002	-.089	.332	.060	.729
No.6	.514	.509	-.018	.033	.067
No.7	.185	.759	-.250	.291	.116
No.8	.719	-.058	-.023	.140	.127
No.9	-.051	-.576	-.381	-.007	.123
No.10	.798	-.069	.155	-.070	-.003
No.11	.271	.212	-.045	.470	.494
No.12	.714	.336	.138	.206	-.011
No.13	.236	.435	.541	.250	.149
No.14	.060	.181	-.244	-.099	.720
No.15	-.156	.740	.228	-.037	.159

Based on these criteria, the factor membership of the 5 (five) factors can be determined as written in Table 4.11.

Tabel 2. Factor and Load Factor

Factor	Items	Load factor	Sum
1	A6	0,514	4
	A8	0,719	
	A10	0,798	
	A12	0,714	
2	A7	0,759	2
	A15	0,740	
3	A3	0,803	2
	A13	0,541	
	A11	-0,045	
4	A1	0,779	2
	A4	0,612	
	A9	-0,007	
5	A5	0,729	2
	A14	0,720	

From the table above, the rotation results show that there are 5 (five) factors tested for their constructs, with the provision of limiting criteria whose loading value is greater than 0.50. The formation of (five) factors whose constructs have been confirmed in all integrity dimension items has 12 statement items that meet the loading requirements of greater than 0.5. Meanwhile, the other two items, namely item A9, with a loading of -0.007, and item A11 with a factor loading of -0.045, must be removed because they are below the provisions.

B. Discipline Integrity

The KMO and Bartlett's test scores were 0.678 with a significance level of 0.000. Because these scores were above 0.5 and significantly below 0.05, the variables and samples could be analysed further. However, a per-variable analysis was conducted using the anti-image method.

Examination of the MSA scores for the discipline dimension items indicated a higher value (>0.5). The significance criteria were: A p-value > 0.05 means H0 is accepted. A Sig. score <0.05 means Ho is rejected. After the first stage, which involved screening several variables to ensure that all variables met the analysis requirements, the core process of factor analysis was carried out, namely, extracting a set of existing variables to form one or more factors.

The factor extraction method used was Principal Component Analysis, and the results are displayed in the Communalities table. The most significant number in item 17 (A17), namely: 0.533, means that approximately 53% of the variance of the item 17 variable can be explained by the formed factors. The smallest percentage of variance is 0.106 in item 21, which means that the formed factors can explain 10.6% of the variance of the item 21 variable. Thus, for other variables, with the provision that the greater the communalities of a variable, the closer its relationship with the formed factors. Below is the recapitulation of the Communalities results.

The results of the overall analysis of variance can be explained by the components formed with eigenvalues greater than 1.00, where there is only 1 (one) factor with the number of eigenvalues greater than 1.00, namely 2,170, with a cumulative total of 36,171. The eigenvalues of the first factor are the largest and are evidence of the existence of a dominant factor in all existing variables/items.

Tabel.3. Rotation MatrixComponent

	Component
No.16	.630
No.17	.730
No.18	.705
No.19	.591
No.20	.537
No.21	.325

From the table above, it can be seen that five items have a factor load of > 0.5, except for item A21, with a factor load of < 0.5. Thus, item 21 must be discarded because it does not meet the requirements.

C. Tolerance and Cooperation Dimension

The results of the factor analysis of the Tolerance and Cooperation dimension yielded a KMO of 0.739, classified as moderate, with a chi-square value of 631.261 and a significance level (Sig = 0.000 at df: 78), indicating a value with a significance level below 0.000. This means that the correlation matrix formed is not an identity matrix, so all item variables in the analysed religiosity instrument are suitable for further analysis.

Examination of the MSA value for the tolerance and cooperation dimension shows a value greater than 0.5. The significance criteria are: Sig. If the p-value is greater than 0.05, then H0 is accepted. Sig. Value < 0.05; then H0 is rejected. The MSA (Measure of Sampling Adequacy) value ranges from 0 to 1, with the following criteria: (a) MSA = 1, the variable can be predicted without error by other variables. MSA > 0.05, the variable can still be predicted and analysed further. If the MSA is <0.5, the variable cannot be predicted and cannot be analysed further, or it can be removed from the other variables. Below is a summary of the MSA values, all of which are above 0.05, assuming all variables are suitable for further analysis.

After the first stage, which involves screening several variables to ensure they meet the requirements for analysis, the core process of factor analysis is carried out, namely, extracting a set of existing variables to form one or more factors.

The factor extraction method used was Principal Component Analysis, and the results are displayed in the Communalities table. The most significant value for item 27 (A27), at 0.835, indicates that approximately 83% of the variance in item 27 can be explained by the formed factor. The smallest percentage of variance was 0.277 for item 30, or 27% of the variance in item 27 can be explained by the formed factor. This result continued for the other variables, with the greater the communalities of a variable, the closer its relationship with the formed factor.

Subsequent analysis focused on examining (a) the number of eigenvalues > 1.0, (b) the comparison of the first eigenvalue with the second eigenvalue, and (c) examining the scree plot, including the component plot in rotated space. The results of the overall analysis of variance, explained by the components formed with eigenvalues greater than 1.00, show that there are three factors with a total of eigenvalues greater than 1.00. One factor has the largest eigenvalue, namely factor 1 (4.046), followed by factor 2 (1.876), and factor 3 (1.1049), resulting in a cumulative variance of 56,396.

The results of the factor membership analysis using the Principal Component Analysis method with Varimax rotation with Kaiser Normalisation resulted in three factors, as shown in the table below:

Tabel 4. Rotation Matrix Component

	Component		
	1	2	3
A22	.507	-.090	.408
A23	-.096	-.028	.706
A24	.199	.287	.737
A25	.332	.317	.691
A26	.168	.276	.603
A27	.892	.197	-.004
A28	.799	.060	.046
A29	-.055	.570	.303
A30	-.072	.510	.105
A31	.766	.003	.209
A32	.047	.754	.118
A33	.363	.691	-.079
A34	.128	.724	.154

Based on these criteria, the factor membership of two factors can be determined as written in the table below.

Tabel 5. Factor and Loading Factor

Factor	Items	Load Factor	Sum
1	A22	0.507	4
	A27	0.892	
	A31	0.766	
	A28	0.799	
2	A29	0.570	5
	A30	0.510	
	A32	0.754	
	A33	0.691	
	A34	0.724	
3	A23	0.706	4
	A24	0.737	
	A25	0.691	
	A26	0.603	

The results of the rotation show that there are three factors whose constructs are tested with the provision of limiting criteria whose loading value is greater than 0.50. The formation of three factors whose constructs have been confirmed in all items of the tolerance and cooperation dimensions has 8 statement items that meet the loading requirements of greater than 0.5. The visualisation of the results of the factor rotation is shown in the image below.

D. Politeness Dimension

The KMO and Bartlett's test scores were 0.688 with a significance level of 0.000. Because these scores were above 0.5 and significantly below 0.05, the variables and samples could be analysed further. However, a per-variable analysis was conducted using the anti-image method. Examining the MSA scores for the discipline dimension, all items showed values greater than 0.5. The significance criteria were: a Sig. A score greater than 0.05 indicates that the null hypothesis is accepted. A Sig. score <0.05 indicates that Ho is rejected. After the first stage, which involved screening several variables to ensure that all variables met the analysis requirements, the core process of factor analysis was carried out, namely, extracting a set of existing variables to form one or more factors.

The factor extraction method used was Principal Component Analysis, and the results are displayed in the Communalities table. The most significant number in item 36 (A36), namely: 0.701, means that approximately 70% of the variance of the variable in item 36 can be explained by the formed factors. The smallest percentage of variance is 0.049 in item 39, or 0.4% of the variance in item 39 can be explained by the formed factors. Thus, for the other variables, with the provision that the greater the communalities of a variable, the closer its relationship with the formed factors. Below is the recapitulation of the Communalities results.

Further analysis was directed at examining; (a) the number of eigenvalues > 1.0, and (b) the comparison of the first eigenvalue with the second eigenvalue, and (c) examining the scree plot, including the component plot in rotated space.

The results of the analysis of the overall variance explained by the components formed with eigenvalues greater than 1.00 revealed only one factor with a total of eigenvalues > 1.00, namely 2,462, with a cumulative total of 49,242. The eigenvalues for the first factor were the largest and evidenced the presence of a dominant factor across all variables/items.

Table 6. Results of MSA Figures for the Polite Dimension

	Component
No.35	.714
No.36	.837
No.37	.814
No.38	.734
No.39	-.221

From the table above, it can be seen that five items have a factor load of > 0.5, except for item A39, which has a factor load of < 0.5. Thus, item 39 must be discarded because it does not meet the requirements.

E. Self-Confidence Dimension

The results of the self-confidence dimension factor analysis yielded a KMO of 0.593, classified as moderate, with a chi-square value of 105.773 and a significance level (Sig = 0.000 at df: 15), indicating a value with a significance level below 0.05. This means that the correlation matrix formed is not an identity matrix, so all item variables in the analysed religiosity instrument are worthy of further analysis.

The examination of the MSA value for the Self-Confidence dimension item reveals a value greater than 0.5. The significance criteria are: Sig. If the p-value is greater than 0.05, then H0 is accepted. Sig. Value < 0.05; then H0 is rejected. The MSA (Measure of Sampling Adequacy) value ranges from 0 to 1, with the following criteria: (a) MSA = 1, the variable can be predicted without error by other variables. MSA > 0.05, the variable can still be predicted and can be analysed further. MSA < 0.5, the variable cannot be predicted and cannot be analysed further, or is removed from the other variables. Below is a summary of the MSA values, all of which are above 0.05, assuming all variables are suitable for further analysis.

After the first stage, which involves screening several variables to ensure they meet the requirements for analysis, the core process of factor analysis is carried out, namely, extracting a set of existing variables to form one or more factors.

The factor extraction method used is Principal Component Analysis, and the results are displayed in the Communalities table, which presents the extraction results. The most significant value for item 41 (A41), at 0.683, indicates that approximately 68% of the variance in item 41 can be explained by the formed factor. The smallest percentage of variance is 0.197 for item 45, which means that the formed factor can explain 19% of the variance in item 33. This result continues for the remaining variables, with the greater the communalities of a variable, the stronger its relationship with the formed factor.

Further analysis was directed at examining (a) the number of eigenvalues > 1.0, (b) the comparison of the first eigenvalue with the second eigenvalue, and (c) examining the scree plot, including the component plot in rotated space. The results of the analysis of the overall variance explained by the components formed with eigenvalues greater than 1.00 revealed two factors with a total of eigenvalues greater than 1.00. One factor had the largest eigenvalue, namely factor 1 (1.906), followed by factor 2 (1.380); thus, cumulatively, the two factors accounted for 54.767 of the variance.

Results of the factor membership analysis using the Principal Component Analysis method with Varimax rotation with Kaiser Normalisation.

Tabel 7. Rotation MatrixComponent

	Component	
	1	2
A40	.780	.219
A41	.780	.274
A42	.139	.793

A43	.663	-.219
A44	-.096	.778
A45	-.379	.230

Based on these criteria, the factor membership of 2 (two) factors can be determined as written in the table below. The rotation results show that there are 2 (two) factors whose constructs are tested with the provision of limiting criteria whose loading value is greater than 0.50. The formation of two factors whose constructs have been confirmed in all items of the self-confidence dimension has 5 statement items that meet the loading requirements of greater than 0.5.

Tabel 8. Recapitulation of Dimensions and Factor Naming

No	Dimension	Factor Naming	Sum
1	Integrity	Integrity	4 items
		Honesy	2 items
		Carrying out tasks well	2 items
		Daring to admit mistakes	2 items
		Responsible	2 items
2	Discipline	Obedient to applicable rules	5 items
3	Tolerance and Cooperation	Respectful	4 items
		Accepting differences	5 items
		Helpful	4 items
4	Politeness	Pleasant manner	4 items
5	Self-confidence	Daring to express opinions in public	3 items
		Optimistic	2 items
6	Valid Sum		39 items
7	Drop Sum		6 items

C. Reliability Test

As for the reliability coefficient in this study, the Cronbach's Alpha coefficient was used and obtained as follows:

Table 9. Reliability Coefficient

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.864	.886	45

The data above show that the Alpha reliability coefficient value is 0.864, indicating that the statement items in the questionnaire have high internal consistency.

DISCUSSION

Social attitudes are crucial for students because they help them develop personally and professionally, as well as fulfil their roles in society. These attitudes enhance collaboration skills, foster awareness of social issues, and prepare students to become responsible agents of change. Furthermore, social attitudes are crucial for fostering good relationships, honing empathy, and broadening insights into diversity (Affandy, 2019).

A nation with character is one with morals and good manners. Conversely, a nation without character lacks morals or standards of good norms and behaviour (Rasid, 2014). One characteristic of individuals with character is that they have good social attitudes. Many factors can influence the formation of students' social attitudes, including emotional and spiritual intelligence (Firdaos, 2017).

This study aims to measure students' social attitudes. This research used a quantitative approach, using factor analysis as its analytical tool. The results of the factor analysis were used to assess the feasibility of variables by considering their KMO and MSA values. In this test, all requirements for a value > 0.50 were met for each dimension of social attitudes. Therefore, the KMO and MSA analyses were suitable for further testing.

The next stage was factoring and rotation. Of the five dimensions, two had a single factor: discipline and politeness. The other four dimensions—integrity, cooperation and tolerance, and self-confidence—each had more than one factor. The next stage was factor validation. In this study, the researchers selected a cut-off point with a factor loading greater than 0.50. Of the 50 items, the majority have a factor load of > 0.50 , except for item 2 (A2), item 9 (A9), item 11 (A11), item 21 (A21), item 39 (A39), and item 45 (A45), which are < 0.50 , so these items must be removed or eliminated. Meanwhile, the reliability coefficient of the social attitude instrument, calculated using the Cronbach's alpha formula, is 0.864; therefore, it can be said that the statement items in the questionnaire exhibit high internal consistency.

V. CONCLUSION

The KMO and MSA results confirm that all dimensions of the Social Attitude construct meet the minimum criterion of > 0.50 . Factor-loading analysis further indicates that 33 of the 39 items exceed the 0.50 threshold, while six items falling below this value were discarded. Overall, the instrument demonstrates solid psychometric adequacy, supporting its suitability for both assessment and research purposes.

REFERENCES

- Affandy, S. (2019). Penanaman Nilai-Nilai Kearifan Lokal Dalam Meningkatkan Perilaku Keberagamaan Peserta Didik. *Atthulab: Islamic Religion Teaching and Learning Journal*, 2(2), 69–93. <https://doi.org/10.15575/ath.v2i2.3391>
- Ahmadi. (2003). *Teori Psikologi*. Pustaka Setia.
- Ajzen, I., Fishbein, M., & Fishbein, M. (2011). *Attitudes and the Attitude-Behavior Relation : Reasoned and Automatic Processes Attitudes and the Attitude-Behavior Relation : Reasoned and Automatic Processes*. 3283. <https://doi.org/10.1080/14792779943000116>
- Areskoug-Josefsson, K., Sjökvist, M., Bülow, P. H., & Rolander, B. (2019). Psychometrics of the students' attitudes towards addressing sexual health scale for students in social work. *Social Work Education*, 38(7), 925–940. <https://doi.org/10.1080/02615479.2019.1582619>
- Chen, Z., Zhang, R., Xu, T., Yang, Y., Wang, J., & Feng, T. (2020). Emotional attitudes towards procrastination in people: A large-scale sentiment-focused crawling analysis. *Computers in Human Behavior*, 110(2), 106391. <https://doi.org/10.1016/j.chb.2020.106391>
- Firdaos, R. (2017). Emotional Intelligence, Religiosity, and Social Attitude of Students. *Jurnal Pendidikan Islam*. <https://doi.org/10.15575/jpi.v3i1.828>
- Gerungan, W. (1998). *Psikologi Sosial*. Ereto.
- Gusviani, E. (2016). Analisis Kemunculan Sikap Spiritual Dan Sikap Sosial Dalam Kegiatan Pembelajaran IPA Kelas IV SD. *Jurnal Pendidikan Dasar*, 8(1), 96–106.
- Hair, J., Blak, W.C., Babin, B.J., Andersen, R.E., & Ratham, R. . (2006). *Multi-variate data analysis*. Pearson Prentice Hall.
- Harrington, D. (2009). Confirmatory Factor Analysis. In *Confirmatory Factor Analysis*. USA: Oxford University Press., <https://doi.org/10.1093/acprof:oso/9780195339888.001.0001>
- Hasbullah. (2005). *Dasar Dasar Ilmu Pendidikan*. PT. Raja Grafindo.
- Jackson, J. E. (1981). Principal Components and Factor Analysis: Part III—What is Factor Analysis? *Journal of Quality Technology*, 13(2), 125–130. <https://doi.org/10.1080/00224065.1981.11981002>
- Jalaluddin Rakhmat. (2004). *Komunikasi Politik, Komunikator, Pesan, dan Media*. PT. Remaja Rosda Karya.
- Mar'at. (2001). *Sikap Manusia: Perubahan serta Pengukurannya*. Ghalia Indonesia.
- Mason, S. L., & Rich, P. J. (2020). Development and analysis of the Elementary Student Coding Attitudes Survey. *Computers and Education*, 153, 103898. <https://doi.org/10.1016/j.compedu.2020.103898>
- Matanari, C., Lumban Gaol, R., & Simarmata, E. (2020). Hubungan Pendidikan Karakter Terhadap Perkembangan Sosial Anak Sekolah Dasar. *Jurnal Educatio FKIP UNMA*, 6(2), 294–300. <https://doi.org/10.31949/educatio.v6i2.435>
- Palok Mayor. (1979). *Sosiologi suatu Buku Pengantar Ringkas*. PT. Ikhtiar.
- Rasid, Y. (2014). Nilai-Nilai Kearifan Lokal (Local Genius) Sebagai Penguat Karakter Bangsa. *Deepublish Publisher*, 1–141.
- Raykov, Tenko, dan G. A. (2006). . *A First Course in Structural Equation Modeling*. Lawrence Erlbaum Associate, Publisher.
- Reid, C. A., Davis, J. L., & Jeffrey, D. (n.d.). *The Journal of Social The Power of Change : Interpersonal Attraction as a Function of Attitude Similarity and Attitude Alignment*. November 2014, 37–41. <https://doi.org/10.1080/00224545.2013.824404>
- Santoso, S. (2014). *Statistik Multivariat Konsep dan Aplikasi dengan SPSS*. Gramedia.
- Subhash Sharma. (1997). *Applied Multivariate Techniques*. John Wiley & Sons, Inc.
- Thompson, B. (2002). *Exploratory and Confirmatory Factor Analysis (Understanding Concepts and Application)*. American Psychological Association.
- Utomo, C. B., & Muntholib, A. (2018). Implementasi Pendidikan Karakter dalam Membentuk Sikap dan Perilaku Sosial Peserta Didik Melalui Pembelajaran Sejarah di SMA PGRI 1 Pati Tahun Pelajaran 2017/2018. *Indonesian Journal of History Education*, 6(1), 1–13.
- W, Back, K. (1997). *Social Psychology*. John Wiley dan Sons Inc.